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THE PRESIDENT'S ADDRESS.

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GENTLEMEN OF THE AMERICAN MEDICAL ASSOCIATION: At the last meeting you cordially conferred upon me the honor to elect me President of this Association. We all justly esteem it the highest position in the gift of the American medical profession. I am fully sensible of my own unworthiness, and also of the far higher claims of many others, to the office you have accorded me. Let me aver to you my high appreciation of your generous recognition of the South, and of the great Southern State I represent; and for myself, I return you the thanks of a warm fraternal heart, for the kind partiality which has guided you in your decision.

THE PAST AND THE PRESENT.

Exalted as may be the position, by the grand objects of the organization, and by the long years through which it has exercised its improving and perfecting influence over the minds, and hearts, and destinies of the medical profession, the honor is still further emphasized by the long line of noble and illustrious men who have recently and in the past guided the deliberations of this National representative body. Look over the roll of honor—the roster of our rulers—from the venerated Chapman to the revered and beloved Flint, and we find, among both the living and the dead, names and the record of lives which fill our hearts with pride—brilliant lights who, like stars of the first magnitude, must for all time continue to illumine the firmament of our profession with the glow of their godlike benevolence, and the unquenchable fire of their genius—cosmopolitan, as well as national men—followed and quoted and honored—very Gamaliels, at whose feet the Pauls of every nation have sat, contentedly drinking in the inspiration of their wisdom, and taking example and encouragement from their daring and their enterprise.

Far lagging in the rear would have been the old world, had it neglected the record and the literature of the new! In the long line of our noble ancestry, among others who adorn the gallery of our progenitors, Rush and Physick, McDowell and Atlee, Deadrick and Smith, Dudley and Eve, Silliman and Hays, Mott and McClellan, Gross and Sims—some of these among the illustrious dynasty of this Association—have each opened to the minds of all nations new fields of science, of labor, and of literature, in which to energize; and, dying, have all left their impress deeply and ineffaceably graven upon the tablets of scientific progress of the old, as well as of the new world. Now, may we ask, who dares *not* to read?

I might well confine my glorying now to only our glorious dead—embalmed in the frankincense, and myrrh, and the conserving sweet-smelling spices of worthy and undying achievements; enshrouded in the spotless robes of their immaculate lives, they remain with us still, even our entailed inheritance—our inalienable trust—our household gods—the archetypes and guardians of this Association.

When we would turn our minds for a moment from the silent, but eloquent, and never-to-be-forgotten dead, to the active, progressive, and ever-hopeful living, we find, in the contemplation of the present, that our dream of the future may be as bright as has been our golden history in the past.

What means this large convocation of earnest, responsible men, this relinquishment of homes and of professional occupations? What means this sea of congregated heads, some burnished, some gray, and some of silvery white? What means this plane of upturned faces, some seamed and furrowed with lines of toil and anxious thought, others youthful, and bright, and hopeful, but all glowing with the inspiration of a noble enthusiasm, all eloquent of, and stamped with the seal of devotion to a common and holy purpose? Let me answer: What we behold is indeed a culmination of the past, but no less is it the prophecy and assurance of the future; some are here in the very outset of a prosperous career, some, midway in the journey which is to end in brilliant achievement, and others near the goal where the laurel and the crown of the victor await them for their perfected work.

These are the contemporaneous makers of the scientific history of our own times. I would gladly signalize and dwell upon their noble part, but I forbear to depreciate them by a trite and trivial mention of their names and work. Too numerous to accord to each his merited meed of praise, you, gentlemen, constitute the working body and stalwart supporters and defenders of the honor of this Association. To you we look for present labor, and to you we look for future glory.

But can all the living be thus passed by? Must our hearts forever yearn and yearn in silence to tell the honor, the reverence, and the love that burns within us? Must our "Bless you, my brother," and our "Well done, good and faithful," die ever "as a voiceless thought?" Who is it that has fought shoulder to shoulder with another in the veteran grand army of the world's campaigns, and has seen him fall out of the ranks, to rise no more; who is it that has stemmed with another the current of the mighty river of Time, or battled with the waves in the tempestuous ocean of life, and seen him suddenly and forever sink beneath the dark waters, and has not mourned the last word unspoken, and bitterly cried out, "Too late?" The good-will and the assurance he had been longing to utter have failed of their application, and they remain valueless in his tender heart like

"unused spices" in the hands of loving women at the Saviour's tomb.

Gross and Sims, illustrious in their lives, loved and honored in their death, the giants of our pride, and the sacred objects of our reverence, have passed beyond the sound of earthly praise. With shining robes more honorable than any toga of office we can put upon them, with crowns more resplendent than those of earthly monarchs, and with harps and melodies more entrancing than the music of our love, or the anthems of our praise, they hear no more the voice of human adulation. The protestations of love and gratitude, now uttered in the bitterness of our grief and in the magnitude of our irreparable loss, fail to unburden our hearts, and they return to us empty of their reward in the pleasure they *might* have given. We are now forever debarred from pouring into the living ear and into the throbbing heart all which custom withheld, and which now we would gladly tell. We indite memorials, we erect monuments, we build mausoleums, and the dead heed them not.

"Can storied urn or animated bust
Back to the mansions call the fleeting breath?
Can Honor's voice provoke the silent dust,
Or Flattery soothe the dull, cold ear of Death?"

Custom and convention allow praise, panegyric, and loud lamentation to the dead, but command silence and repression to the living, however loved and worthy, and however near their journey's end.

As I glance around this crowded assembly, as I cast my eye over the lengthened list of our membership, here and there among the buoyant, active workers of to-day, my glance becomes a gaze of pleasure, and my eyes brighten as they fall upon the familiar forms and read the names of some—now sadly few indeed—who in a former generation, and through all the toilsome, turbulent years between "then and now," have lovingly worked on, as they are working to-day. To many their faces are unfamiliar; to some the history of their early work and achievements in this Association are unknown. "A new Pharaoh has arisen which knoweth not Joseph;" which knoweth not their patience, their devotion, their inestimable work, and faithful stewardship in the past, as they see and esteem them now. It would be unparliamentary, at least, to call their names, but let me indicate in some degree the valuation and the worth we should set upon them.

I see before me more than one who, present at the first foundation of this Association, assisted—over a generation ago—in organizing out of the chaos of the medical profession of the United States this congenial, facile, and efficient body; multiple in its sections and departments, heterogeneous in its structure, pursuing in each division objects diverse and special, yet each contributing to form an organization powerful in the uprooting of ignorance and error—mighty and invulnerable in the defence and promulgation of truth.

Again, I have before me some still in the ripened prime of vigorous manhood, who were active in our halls and in our discussions over thirty years ago; some, holding honorable and laborious official stations then, are, by their own elections, most active as private laborers now.

Again, among this multitude can the anxious eye of friendship, long familiar with their forms, readily search out some in whose breasts not even the burthen of years, or the calamities and casualties of prolonged and laborious lives, could abate the honor and devotion they gave in the heyday of their early prime to this Association—once the child of their trembling hope, now the object of their pride and triumph.

Make haste to do honor to all these venerable men; our Nestors—the fathers of our history and the sires of our generation—honor them *now*, while still they walk in and out before you, and among the children of men. Let me voice for this Association, in their living ears and in glad gratulation to day, the avowal and the eulogy we may haply sob forth in bitter lamentation to-morrow—let us in manly frankness to-day pour into their throbbing hearts some little of the praise and commendation which to-morrow we may have to engrave in tearful sadness on the cold, insensate marble of their tombs.

Once more—and I will still remain impersonal in the familiar sketch I would portray—our eyes may at this moment rest with honoring gaze upon one who at the present time, and before the present generation of laborers in the field, might stand prominent amongst us only by the encouraging and ever-inspiring magnetism of his presence, and by the stupendous and self-sacrificing labor in which he is ever willing to engage. He labors now as he labored two-score years ago, well entitled to the honored name of "the father." No one of the sons of this Association can excel him in watchfulness for its interests, in tenacity for its honor, in unceasing labor for its advancement. No neophyte or tyro is he in its affairs; he presided at its birth, nursed it through infancy and childhood, was the guide and counsellor of its manhood, and now in its ripe maturity, adds spirit to its energies, watches its progress, faithfully guards its good name, and is the laborious chronicler and promulgator of its intelligence. Too full of the meekness of wisdom to be elated by praise, too worthy of praise to be defiled by flattery, and among all the living, standing foremost in the duration and constancy of his devotion, I could almost ask you to allow me, by virtue of the authority in which I am clothed, to bid him stand, as sovereigns bid their heroes kneel, and dub him with the ensign and the title "*Noblest Roman of us all.*"

Thus have I endeavored to illuminate my brief presentation of the past and of the present with pictures of the *personnel* of the Association—with portraits and groups of dead and living men. Let us honor, cherish, and hold sacred the memory of our illustrious dead; let us not fear to encourage and give solace to our long-suffering, faithful, and noble living.

OUR PLACE OF MEETING.

Already have I referred with cordial comment to your graceful recognition of the South in the appointment of the present place of meeting. Besides the bright sunshine and the balmy air redolent with the perfume of tropical fruits and flowers, enlivened by the glittering plumage and made musical by the sweet spring voices of winged choristers, there ever breathes in the atmosphere and throbs in the pulses of this monster mart a solemn and weird consciousness—a sanctity of association—which in the minds of our profession, neither time nor wide separation, nor diverse political opinions, nor even internecine war, have been able to profane or in the least obscure. The glorious

triumph of our States upon this ground over the foreign foe, their inglorious triumphs upon this ground over each other, when marshalled in mad and mortal but, on each side, manly and patriotic antagonism, fade from our minds when as physicians and philanthropists we remember "The pestilence that walketh in darkness and the destruction that wasteth at noonday." They here, too, often have been the invader and desolater, and here, too, have they often been met by the heroes of our profession, the noble and devoted defenders of the people.

Though with a health-bill and death-rate ordinarily bearing favorable comparison with other great cities of the Union, New Orleans has sometimes, like the happy valley or the peaceful hamlet of romance, become the scene of death and desolation, its bright homes clouded with sorrow, its prosperity changed to adversity.

How often, wherever we may have been, wherever our homes, whether in the green mountain fastness of health, in the torrid interior, or on the dented seacoast, how often, I repeat, have our minds and hearts been turned with fraternal sympathy and profound interest to our devoted brethren of this lovely city of the Gulf, battling with the destroyer, and nobly giving up comfort, and safety, and health, and life itself in a martyrdom to the love they bear mankind. Thus has this region become sacred and heroic ground with the medical chronicler and historian.

How changed is the present aspect. What magic metamorphosis do we find. The whilom shunned and dreaded pest-house of the nation has become the inviting and the crowded Mecca of the wide world's pilgrimage. From the remotest bounds of civilization the call has met response, and now are gathered here, in generous rivalry for excellence in the arts of peace, the representatives of all our States, and of nearly all the foreign nations.

Here are the products of agriculture, of manufacture, and of mines—the triumphs of genius, the achievements of ingenuity. Here, too, are the medals, mementoes, and heirlooms of the past, the proofs of progress in the present, and the unlimited foreshadowings of the future, all collected in one interminable tableaux and unbounded panorama, opening to view the most comprehensive exposition of the world's advance, making the grandest demonstration of man's triumph over the rebellious realm of nature, and of his divine right to subdue, and hold his kingly rule over her wealth, her potencies, and her potentialities.

May I not here congratulate this Association that in our customary annual wanderings, and by the generous hospitality of our brethren of New Orleans, we, too, have been brought to witness a scene so rare and rich in incident, and that we, too, have been made to act a part in a wonderful drama, so abounding in interest, instruction, and enjoyment?

Highly do we value the occasion, and well will we remember our coming to this commercial emporium of the South, and her grand Exposition of the world's progress; warm and grateful will ever be our memory of our brethren and of her people, opening wide their arms as hosts and entertainers of guests from every corner of the world's domain; profound and long will remain our admiration and our wonder for this lovely Crescent City, as she sits like a beautiful queen in stately dignity, commanding her far-reaching iron tributaries, while the great Father of Waters, the mighty monarch of the valley, rests his majestic head upon her lap, pays homage to her power, and pours his libation at her feet.

THE ASSOCIATION A REPRESENTATIVE BODY.

The spirit and intent of our American institutions are, in a certain view, aptly represented and illustrated in the organization and high objects of the American Medical Association. Like the National Congress, each meeting represents, with more or less accuracy and truthfulness, the tone, the energy, the progress, the various shades of opinion, and the sometimes widely differing results of observation and experience, as modified by climate, geographical and social conditions, population, and locality. To generalize and harmonize these diverse elements, and to educe from them laws compatible with the interest and for the general welfare and advance of the whole, is no more the object and the duty of the political National Congress than of this scientific National Association.

They are both representative bodies, each with a broad constituency; the one in the State legislatures and in the direct franchises of the people, the other in the State associations and other medical organizations that have honored and trusted them as delegates to represent and act for them at our annual meetings.

The bills read and discussed, whether originating in the House or Senate, or in a message from the President of the United States, when enacted into laws for the good of the people, are, as we may hold, no more effectual in the attainment of their ultimate and benevolent ends than are the principles evolved, and the perfection of methods accomplished, in the readings and discussions in the several Sections of the American Medical Association. They are each and equally for the enlightenment and guidance of the two great constituencies represented; ours a constituency of unequalled intelligence and benevolence, the noble, humane, and learned medical profession to the remotest bounds of our country. To remedy what may appear to be defects in organization; to supply what may seem to be deficiencies in legislation, is the privilege and the duty of each of these representative bodies, at the time of their convocation or assembling.

A message from the Executive, as I have said, may originate discussion having in view improved or altered legislation in Congress. It is by no means without precedent that the deliberations of this Association may be sometimes influenced by propositions from the Chair. Some of our most important and valuable measures bearing upon our progress and welfare have been thus brought to our consideration—the transformation of our publication of the Transactions of the Association from an annual, tardy, and ponderous volume into a weekly journal, promptly and rapidly presenting our work not only to the members, but to the entire profession, as the proposition of President Lewis A. Sayre, at New York; and the invitation for the Ninth International Medical Congress, to meet in the United States in 1887, as the proposition of President Austin Flint, at Washington, are important and notable instances in which great benefit and improvement to the medical profession of this country will result from action inaugurated

by and emanating from the Chair of this Association;—or, to continue the worthy parallel I have begun, by a message from the Executive to the Legislative Department of this Association.

By a careful consideration and review of the Constitution and organization of this Association, it will be found that the wisdom and forecast of our predecessors have left but little to amend, whereby we can add to the facility of its work or to the scope and comprehensiveness of its design.

THE WORK OF THE ASSOCIATION.

No message from the Chair of the present meeting can equal in their importance some of those fundamental changes heretofore made, as in the organization of Sections and Committees whereby the present perfection has been attained—none yet to be made, so far as can now be seen, can equal in immediate and wide utility and improvement, both to the Association and to the medical profession, that proposition by which the journalizing of the Transactions has been accomplished; and it may also be stated that none has ever been received with more favor and cordial assent than that by which we are to receive the incalculable benefits resulting from the acceptance of the invitation for the Ninth International Medical Congress to meet in America.

The publication of the *Journal* may now be regarded as an assured and satisfactory success. In its first two most trying and perilous years, the foundation has been laid for an influential and commanding future. It has already secured constant communication and comity among the membership of the Association, and it will unquestionably, in time, become the means of organizing for good the entire medical profession of the United States, while the International Medical Congress in America will bring this Association and the medical profession of the world in direct and intimate relation; incorporate us with the scientific organizations and with the advancing and progressive researches of all the foreign nations.

As a member of the Board of Trustees having in charge the publication of the *Journal*, and also as one of the General Committee having in charge the invitation and organization of the Ninth International Medical Congress, and being intimately conversant with the stupendous labors and embarrassing difficulties involved in both these enterprises at their outset, it affords me pleasure to state from this chair that a full amount of praise and commendation are due to the Editor of the *Journal* and to the executive officers of each of these two great trusts. They have faithfully and laboriously brought them both to a state of progress assuring of brilliant and permanent results.

Notwithstanding the apparent completeness of our organization, and the generally satisfactory operation of our working plan, I will ask in this brief portion of the hour usually allotted to the President's Address, to make reference to a matter of recognized importance to the medical profession, and which, it has long appeared to me, should at some early period in the future be made one of the subjects of our diligent and regular investigation; at least engaging our frequent consideration, if not made one of the departments for the annual readings and discussions in one of the Sections.

The subject I refer to has ever been justly regarded as one of much complexity, difficult to present clearly, and still more difficult to expound and elucidate. It is no less one, however, which will be recognized by all as deeply involving, if not compromising, the comfort and welfare, and, still more, the dignity and honor of our conscientious, learned, and lordly profession.

I would comprehensively state the problem—for it well deserves that name—as "The relations of the medical profession to tribunals of laws," or, as I have heretofore more briefly summarized it—

THE DOCTOR IN THE COURTS.

That the position of the medical witness, and, to a certain extent, all professional and expert testimony before the courts of law, is anomalous, and often one of false relation to justice, as well as to the ends of humanity, and sometimes mortifying to the pride and self-respect of the deponent, few will deny; for but few have been so fortunate as to escape the annoying experience of being at one time or another the subject of such arraignments—happy has he been who has had only his intelligence and his integrity assailed, and happy, too, that no malpractice suit has deprived him of his liberty and living as well.

My object is more to bring the position of the medical man summarily before you, as he stands in his several relations to the tribunals of law, rather than to describe minutely that with which we are already familiar, or to present elaborate arguments to establish the existence of evils of which we are already convinced. I will, therefore, briefly refer to only a few of the more prominent *rôles* in the forensic drama (too often a farce), in which he is often forced to play his part, and in which, though he may be repeatedly *encored*, he seldom elicits applause.

At the present time, and in the eyes of most communities, the plane to which the medical deponent and expert has at last gravitated is but little above that of the ordinary, if not the partisan, witness. The light of scientific truth he sheds is even sometimes suspected as coming with bent and refracted rays through the distorting lens of self-interest and a paid opinion. From circumstances which condition his testimony, he seldom now occupies in this country the honorable position of *amicus curiæ* or friend and instructor of the court on scientific questions, upon which may rest an important judicial decision. He is almost invariably presented as the medical witness, or the medical expert in behalf of one side or other of the case upon trial. He is cited to appear as a witness in its behalf more frequently, not because he possesses superior knowledge of the scientific truths about which his testimony is to be conversant; not because his medical opinion *per se* is entitled to more confidence than that of another, and, still less frequently—we could hope, never—because he has been suborned; but he is often selected because, with a certain standing in the community, he is known to hold opinions, or, on the representation of the attorney, can be made to adopt opinions favorable to the side on which he is to depose. Quite often his only claim to the character of a medical expert depends upon a summons thus conditioned. The reliance upon medical testimony and, in time, confidence and respect for the

medical profession, must necessarily be depreciated by such exponents of them both.

Professor Washburn, of Cambridge, quotes the following words of Lord Campbell in addressing the House of Lords in regard to scientific testimony in general: "What are called scientific witnesses come with such a bias on their minds to support the cause in which they are embarked, that hardly any weight should be given to their evidence."

Without further general remark, I will here refer more or less briefly to the three principal positions or attitudes in which, as professional men, we most frequently stand related to the tribunals of law, viz.: first, as the medical witness; secondly, as the medical expert; and, thirdly, as a defendant in suits of malpractice.

In each one of these relations it could readily be shown that the medical man labors under disadvantages which do not, in the same degree, embarrass either the testimony or the defence of any other class of citizens. This is not the occasion to enumerate them, much less to put them under discussion. They have been long and fully recognized by the members of our own profession, while some of the most profound and astute minds of both the bench and the bar have diligently studied and yet have failed to remove them. For the deponent, whether medical witness or expert—and here we can consider them together before the jury—these difficulties often arise from the unlimited number and diversity of facts, and sometimes of principles, necessarily used as predicates for medical induction, and from the unavoidable complexity apparently connected with the reasoning by which conclusions, often perfectly legitimate, are arrived at. Thinking in technicalities, he is yet called upon to express himself in the plainest vernacular, often before an ignorant jury, or at least in terms simplified for the ready comprehension of non-professional minds.

This last requirement is often violated; not always from a pedantic inclination, but from embarrassment under the novelty of the situation and from the little familiarity with and thought given to questions in forensic medicine, and to the object of medical testimony as being instruction to the jury. He may be like Moses, "learned in all the wisdom of the Egyptians," but if he deposes only in the Egyptian dialect, only an Egyptian jury can be enlightened by him.

Not alone in our own country, but at a still earlier date, and apparently with even a more sedulous care, have the forensic wisdom and ingenuity of foreign judicatories been exhausted in various attempts to elevate the position and to render more available to the ends of justice and equity the scientific witness and expert. Prussia, recognizing the evils of ignorant and unworthy experts in the medical profession, as well as in all others, from which scientific testimony has to be elicited in grave questions pending before the courts, has a toxicologist appointed by the Government, and a permanent commission of experts in matters connected with medical science. In Scotland, medical witnesses are said to deliver their examinations in writing, but are subjected to oral cross-examination before the court; in France, the judges decide who shall act as experts in certain cases, also what questions shall be submitted to them, the answer being returned to the jury in writing; "and practically it is said to have the weight of conclusive evidence."—*Washburn.* "In England," continues Professor Washburn, "much speculation and various schemes have been suggested for obviating the objectionable features of expert testimony, but thus far without the adoption of any system."

It will be seen that all these efforts, both in the United States and in the several countries of Europe, comprehend all scientific experts, and among them the medical deponent. They are not made in behalf of the witness, either to elevate his position or, except incidentally, to recognize the high order of his testimony, but only to guard against his oft-time ignorance and unworthiness, and to make his testimony available to the courts. In most of the European courts mentioned, however, there is an incidental protection given to the scientific medical witness from the assaults and indignities offered by the examiner and the advocate.

In the United States, even, this incidental protection is rarely enjoyed by the medical profession. Often each side calls its medical expert, and his testimony, whether scientific or ignorant, impartial or partisan, is dealt with in open court by the advocates and examiners, at whatever cost to the witness, so that it can be made only to subserve the interest of one or the other side. Quite often the cause of justice is lost sight of, the significance of the deposition perverted by the artful methods of the examiners, and the casting of doubt on its credibility by the advocate. He is, as a witness and also as an expert, subject in his deposition to the arbitrary, and sometimes offensive, and often irrelevant interrogation of the interested attorney, whose duty it may become to misinterpret, or to suppress the significance of his testimony, and not infrequently to wrest it to the ends of that which, though the common practice of the law, are not the ends of equity and justice. In this way can the profoundly scientific and strictly conscientious medical witness or expert, on account of the inherent difficulties of his deposition, as before stated, more than any other class of witnesses, be made to appear to the average jury and to all ordinary minds present in the light of a crafty charlatan—the tool of some hidden interest guiding and directing his testimony.

Albeit the situation is one of grave and deplorable falsity and humiliation, I may here, for its aptness, perhaps not improperly indulge in what might otherwise be considered a facetious illustration of this perversion and suppression of medical testimony to the nullifying of justice, and, "for the nonce," to the degradation of the medical witness and expert in the eyes of the jury and "all spectators." The incident is accurate in all essential particulars.

The case was one in which the wife had been accused of causing the death of her husband by poison—all attendant circumstances and testimony in the case confirmed the suspicion; and, lastly, arsenic had been found in abundant quantity, by careful and laborious analysis, in the stomach and tissues of the dead man. The medical expert was one of the most conscientious and distinguished members of our profession, and a founder of this Association; and, withal, "as mild a mannered gentleman as ever"—had his throat cut, or his testimony scuttled, before an American jury. The advocate for the defence was one whose name, if mentioned, would at once be recognized by all present as one of the leaders of the American bar, and a states-

man of the land; and withal, one of the most powerful criminal lawyers that ever swayed the minds of a jury in behalf of the accused.

Scene.—The crowded court-room, many counties distant from the homes of both the medical witness and the advocate.

Lawyer: Are you a physician?

Medical Witness: Yes.

L.: You are a professor in —— College?

M. W.: Yes; Medical College of ——.

L.: What Chair do you hold?

M. W.: Chemistry and Pharmacy.

L.: Are you in the habit of analyzing for arsenic?

M. W.: Yes.

L.: Do you often find it in cases when called upon for your testimony in court?

M. W.: I have repeatedly found arsenic, or other poison in the stomach of such persons.

L. (*with emphasis*): Have you ever failed to find the poison?

M. W.: It has so happened that in the cases I have examined, the existence of poison had been circumstantially made out, and my analysis established the fact.

L.: You have always detected the arsenic, Doctor, in such cases?

M. W.: Yes.

L.: May it please your honor, we are satisfied with the witness.

Medical witness retires.

This was the cross-examination, and this lawyer for the defendant had the closing argument. No further questions were asked the witness. He had shown to the satisfaction of all intelligent persons present that he had, in a most scientific, conscientious, and expert method, supplied the last and convicting link in the unbroken chain of evidence required to establish the guilt of the accused.

This was the attention the lawyer gave to this medical expert testimony:

"Now, may it please the court, as to this medical—what they call 'expert testimony.' Consider the facts: He is a doctor; he is a professor in a college; his chair is chemistry and pharmacy.

"Gentlemen of the jury, he is in the habit of testing for poison—he is the arsenic hunter and arsenic finder for his college, and, you see, he is a good one; he *always* finds the arsenic. He is obliged to find it—it would ruin his college and ruin him i he did not find it; but, gentlemen of the jury, I appeal to you as intelligent and scientific men, you are not going to allow my innocent, unfortunate client to suffer to support the credit of that college!"

The murderess was acquitted by the jury almost without leaving their seats, as any one who knew the giant of an advocate she had might well have expected.

This was *perversio veri*, as well as *suppressio veri*—not by the witness, but by the lawyer. The medical deponent was, in his own way, almost as great a giant as himself, but he was a doctor in the court, and there he was a giant *bound*.

EXTORTED TESTIMONY.

Among many other burdens under which, as a witness, the medical man at present labors, is the *hard lot* imposed by that principle of common law, still existing in most of our States, which declares that the necessary confidential revelations of patients to their medical advisers, however sacredly held by the physician, are not to be regarded, in the courts, as "privileged communications." It reads thus, in exact legal terms, as I find quoted by Prof. Christopher Johnston, of Baltimore (*Trans. Med. and Chirurg. Faculty of Maryland*, Vol. 1874–1878): "Protection is not extended to *medical persons* in regard to information which they have acquired confidentially by attending in their professional characters." *Greenleaf on Evidence:* "The privilege is not accorded to clergymen, although contended for chiefly, if not wholly, in reference to criminal conduct and proceedings;" "Rome punishes the priest who reveals penitential confessions; and Mascardus states that the confession is made, not so much to the priest as to the Deity whom he represents, and that therefore the priest, when appearing as a witness in his private character, may lawfully swear that he knows nothing of the subject."

A very different character is here brought to our minds in the person of one of the witnesses in the trial of Queen Caroline. As we have it stated, "the trial proceeded, and the first witness was Zoödoro Majocchi, postilion to General Pino. If his evidence in chief was believed, he proved abundantly enough to establish the guilt of the Queen; but he entirely broke down when cross-examined by Mr. Brougham, and to questions respecting matters of which he must have had a lively recollection, the only answer to be obtained from him was '*non mi ricordo*,' which passed into and still continue household words in England for denoting mendacity." (*The Lives of the Lord Chancellors*, vol. x. p. 297.)

But neither the conscientious and authorized evasion of the priest, nor the mendacious one of this government witness will answer as a refuge for the doctor in the court; he must either betray the most sacred trust upon the assumed existence of which rest all the unquestioning revelations of all his patients, or he must pay the penalty—ordinarily fine or imprisonment—of "contempt of court," by boldly and honorably refusing to appear.

I believe it to be, however, the natural impulse which soon becomes the habit, more or less, of every honorable physician to forget, as far as may be, all that occurs in his professional relations with his patients, except such points which relate directly to the nature and treatment of the case. These points only recur to his mind when brought again into professional relations with the patient. Of many things left as a strong impression in the minds of the other party to the interview, I doubt not both he and the priest might conscientiously answer, "*non mi ricordo*."

But we will continue the legal dicta upon our subject: "In regard to *professional* communications, the reason of public policy which excludes them applies *solely* to those between a client and his legal adviser."—*Greenleaf.* "The foundation of this rule," says Lord Chancellor Brougham, "is not on account of any particular importance which the law attributes to the business of the legal professors, or any particular disposition to afford them protection; but it is out of regard to the interests of justice, which cannot be upholden, and to

the administration of justice which cannot go on without the aid of men skilled in jurisprudence, in the practice of the courts, and in those matters affecting rights and obligations which form the subjects of all judicial proceedings.

"This 'privilege' extends to all papers or other communications; all letters written or entries made by the attorney, in his capacity of legal adviser; it extends to all communications made by the client to his attorney, though under a mistaken belief of its being necessary to his case." Every mark or record of a nature relating to, or for the purpose of professional advice or aid upon the subject of his rights and liabilities is placed *under the seal* of the law, which once fixed upon such communications, *remains forever*, unless removed by the party himself in whose favor it was there placed.—*Greenleaf.*

It is plain, then, that *practically* the private communications from the patient to his medical adviser are the only ones that ever become the subjects of extorted testimony, for it is a matter of general knowledge—and the ecclesiastical foundation is heretofore shown——that the devoted members of the Catholic priesthood will welcome fine and imprisonment, and the stake itself, before they would betray one item of penitential revelations made in the confessional. To our honor be it said, in sentiment at least, the medical profession is little or not at all behind them in faithfulness to its sacred trusts. And yet, in some of our States, the hardship is still greater and the penalty more inevitable, perhaps, with the physician than with the priest. "As the law now (1878) stands," says Dr. Johnston, "'the medical person' so confided in has no protection in the law; even if the judge choose to overlook his refusal to appear, the doctor, like any other ordinary witness, may be prosecuted for damages sustained by the party calling him, if it can be shown that by the withholding of testimony the party's interests had suffered."

It is pleasant to find that in the statutes of some of the States a complete *reversal* of this principle of the common law has been made. At an early period the enlightened State of New York began to manifest a liberal and humane state-craft upon this subject of confidential communications. In June, 1813, DeWitt Clinton, mayor, in the court of general sessions, ruled that "no minister of the gospel or priest of any denomination whatsoever *shall be allowed* to disclose any confessions made to him in his professional character in the course of discipline enjoined by the rules or practices of such denomination;" and by the revised statutes, "no person duly authorized to practise medicine or surgery *shall be allowed* to disclose any information which he may have acquired in attending any patient in a professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or to do any act for him as a surgeon;" and by the second revised statutes, "information disclosed to a physician while attending a patient in his professional capacity, which information was necessary to enable him to prescribe for his patient, is declared to be a confidential communication, which the physician is not allowed to divulge without the express consent of the patient, for this is the privilege of the *patient* and not of the medical adviser."

"In Missouri, Michigan, Wisconsin, and Iowa statutes of the same effect have been enacted."—*Greenleaf.* The above was the progress made by the several commonwealths in this country up to the period of the publication of the valuable statistics, from which I have so freely quoted on this branch of my subject. There could be no more seasonable time or any better method or opportunity than this, offered in the present meeting of representatives from all the States, to procure in the near future the exact state of the law as regards extorted testimony in the various States at the present time.

That this principle of the common law, unrelieved by any statute in most of our States, conferring "privilege" on the confidential communications of patients to their medical advisers, deeply concerns the interest of communities, and is a constant and degrading challenge to the honor of our profession, we all must deeply feel.

I have presented *Extorted Testimony* as one of the many anomalous phases of our relations to the tribunals of law, all of which relations, with another yet briefly to be presented, require our early, earnest, and systematic consideration.

THE MEDICAL DEFENDANT.

There are many conditions of professional life in which the medical man may become a defendant, either justly or falsely accused. It is, however, in suits for malpractice that the danger and the evil have, in the course of years, grown so unpleasantly familiar to the medical profession. The scientific, skilful, and faithful surgeon, particularly should he be known to possess means to meet damages, no less than the ignorant and unscrupulous pretender, is constantly liable to have laid to his charge often the unavoidable results of injuries, as the consequences of either incompetence or neglect.

Unavoidable deformities and disabilities remaining after the treatment of fractures and dislocations have been made the most frequent occasions for arraignment of the surgeon; and in complicated cases of fracture the prudent and circumspect surgeon cannot entirely dispel from his mind this *bête noir*—this phantom, which may grow into a reality, to destroy his peace and cast a blight upon his reputation and his fortune.

My own first experience in the courts was in 1842, as a medical witness in defence of a most distinguished member of our profession—my master in surgery, Paul F. Eve, afterward President of this Association, in a groundless suit for damages laid at $20,000. The case was a comminuted fracture of the patella, resulting in gangrene and amputation. Able counsel was engaged, and though the suit was abandoned after the taking of testimony, the loss of time, cost in fees to lawyers, and temporary injury to reputation, summed up an amount of personal damage difficult to estimate adequately.

At various times and in different medical bodies, this question of malpractice suits has elicited attention. In 1856 the Committee on Surgery, Dr. J. W. Hamilton, Chairman, reported to the Ohio State Medical Association that in their opinion, the subject of malpractice was at that time of more importance than any other connected with surgery. "There is a standing and, apparently, a cumulative evil—an evil bearing with the weight of an incubus upon the profession. It is the

frequency of difficulties on account of alleged malpractice in the treatment of fractures . . . During one week in as many counties, four cases were tried."

I think, on examination of the records of the courts in the various States, and also from frequent communications, both private and in published correspondence in our journals, we may safely say that the evil is but little or not at all diminished at the present day.

It had been my design to give extended attention to this evil, than which no other more strongly characterizes the relations of the medical man to the tribunals of law, but the space already occupied with the relations of the medical witness and the expert admits of no further addition here to this address. The evil is, however, unfortunately, too widely recognized and keenly appreciated in our profession to require either elaborate presentation or extended comment.

A SECTION OF FORENSIC MEDICINE.

There are certain departments of medical science which apparently have no *special body of facts*, so to speak, which may be regarded as intrinsically their own. They are based, and often very broadly too, upon the facts and developments which specially pertain to some other department, and sometimes to many other departments of knowledge and practice growing out of them. The science of sanitary medicine is a department preëminently of this kind, hence it could have had no separate existence until after advanced progress had been made in such branches of investigation as those upon which we now find it expansively based.

"Modern sanitarians," says a recent writer, "do not pretend to lay claim to the origination of the knowledge that preventive medicine has utilized in the establishment of its principles, or in the efficient application of the measures to secure the public health. The rapid advances which curative medicine has made in the study of the causes of disease, whether atmospheric or telluric; also the rapid strides in pathology and in the discovery of disinfectants—all have contributed largely toward the present satisfactory status at which sanitation has arrived."

Forensic medicine in this respect is just such a department as sanitary medicine. It has no body of facts especially its own, and while it has wide and intimate relations with all the branches of science, it is individually the province of none of them. It depends upon bringing them all, when necessary, into combined relation with law, as sanitation has brought them into combined relation with the public health, and with the hygiene of communities.

I am aware that in the not distant past medical jurisprudence was, in some sort, comprehended in the scope of the regular Sections of this Association, affiliated with chemistry on account of its frequent relation to toxicology; or with psychology, on account of its perhaps more frequent exercise in questions of insanity; or with surgery, on account of the appeals made to it in suits for damages after the treatment of fractures; or again, with obstetrics, because criminal abortion or bastardy may give rise to questions of law. In any one of these individual associations it would be curtailed of its domain, dwarfed in its dignity, and perverted from what should be the comprehensive and beneficent intent of the department of legal medicine as an object worthy the study and cultivation of this Association.

As recognized by this Association, the Department of Forensic Medicine should comprehend all the subjects as referred to in these several departments; but besides them, every question or occasion through which the medical man can be brought into relation with the tribunals of law; whether, as a medical witness, as a medical expert, or as a medical defendant; or in time, when he shall have attained to his true dignity as *Amicus Curiæ*, or Adviser of the Court, his dictum equivalent to conclusive evidence, his scientific wisdom worthily rewarded as enlightment, indispensable in the upholding of justice; and his profound and conscientious opinion accepted with the same unquestioning confidence as to its integrity, as that which is yielded to the judicial ermine, and the charges from the bench.

In the organization and subsequent changes of the sections, medical jurisprudence seems at last to have disappeared as a fully recognized platform for our readings and discussions. There can be no one who values more highly than I, or recognizes more fully the dignity of every subject, even be it on the very outskirts of the domain of medicine, but none can be of higher importance in the present and the future, than attention to our concern in the department of Forensic Medicine. I would not wish to appear either invidious or irreverent, when I charge you. Let us still in our deliberations continue to "pay tithes of anise, and mint, and cumin, but among them all, let us not neglect the *weightier matters of the law*."

In conclusion, gentlemen, I would with great deference recommend that a committee—of which I would ask to form no part—be appointed to consider the expediency of organizing, or of rehabilitating a section of forensic medicine, for the reception and discussion of papers and reports on all subjects conversant about the important, but, at present, anomalous and little understood, relations of the medical man to the tribunals of law.

In time, may we not be able to prophesy of legal medicine in the words of the now almost mythic Seneca: the day will come, when those things which are now hidden shall be brought to light by true and persevering diligence—when our posterity will wonder that we should have been so ignorant of that which is so obvious.

THE ADDRESS IN MEDICINE.

Delivered April 29, 1885.

BY HENRY D. DIDAMA, M.D.,
OF SYRACUSE, N. Y.

THE prescribed duty of the Chairman of the Medical Section is to acquaint you with the progress made during the past year in Materia Medica, and the Practice of Medicine. A literal compliance with the mandate would subject you to a wearisome recital of facts and fancies which have been gathered already by enterprising medical journals and scattered broadcast throughout the world. The spirit of the injunction may be honored by the omission of minor and as yet unestablished additions to our armamentarium, while a few comments are made on the two recent discoveries, which have not entirely escaped popular and profes-

sional attention—Comma Bacillus and Hydrochlorate of Cocaine.

THE HYDROCHLORATE OF COCAINE.

The prompt and unprejudiced experiments made with the new local anæsthetic; the cordial, enthusiastic, and universal acknowledgment of its merits are a refutation of the charge that the medical profession is hampered by a blind and dogged conservatism. The drug is still in its infancy. Its anæsthetic properties are so remarkable that its use has been limited mainly to surgery, and especially to operations on the eye. But that it has a valuable future in medicine also there can be no doubt. Its ability to produce contraction of congested bloodvessels and pallor of the mucosa early suggested its probable utility in various pathological conditions.

Used as a collyrium in conjunctivitis, and in the form of spray in acute and chronic nasal and laryngeal catarrh, it has been of service not only as an adjuvant, but as the principal remedy. Speakers and singers afflicted with sudden and even persistent hoarseness and aphonia, have found speedy relief, and a restoration of vocal functions. It is not improbable that, used with the atomizer, it may mitigate the severity of the paroxysms of pertussis, and alleviate the dreadful distress of tubercular laryngitis. Internally—if its price shall not continue to forbid its general employment—it may be found serviceable in gastric irritation and catarrh, and like the leaves from which it is extracted, it may prove to be a quick and powerful muscular invigorator.

THE COMMA BACILLUS.

The brilliancy of the discovery of the comma bacillus by the already immortalized Koch, is universally admitted, but the claim that this microbe is the pathogenetic factor in cholera, is stoutly denied by some eminent observers. This denial is echoed by many worthy people who are constitutional doubters, and who habitually substitute prejudice for patient investigation.

It is asserted on the one hand that the comma is not pathognomonic of Asiatic cholera, being found in the dejections of cholera morbus, and even in healthy oral secretions, and on the other hand that in many cases of Asiatic cholera it is entirely absent, and that if it happens to be found its presence is a harmless coincidence. So confident has been this scepticism that its devotees have actually indulged in cholera dejections swarming with bacilli as a beverage. Surviving the somewhat repulsive experiment, the inference has been drawn that these microbes have no infectious properties.

Klein and others have demonstrated that the tank water in various parts of India is fairly alive with these punctuating bacilli, and that the natives drink it and them with avidity and impunity. The poor maligned comma microbe seems now in a fair way to have a reputatation for innocence fully established. His brother, the bacillus of tubercle, had a similar checkered experience. Miliary tubercle, it was asserted, identical with that caused by the bacillus, could be produced by inhalations of glass-dust, or by inoculations with any inert substances. One zealous doubter hastened to proclaim that the microbe was a base impostor; that what seemed to be a living organism was simply a masquerading fat crystal. But more extended observations and experiments, which excluded former sources of error, have so established the morbific character of this microbe that the affirmation may be made with some assurance—*every tubercle comes from a bacillus.*

In regard to the comma, Klein, in a recent discussion, admits that while this bacillus in and of itself is harmless, it yet does excrete or produce a virus or poison which causes cholera, so that after all the comma is actually essential to the existence of cholera, and the formula is justified—*no comma bacillus, no cholera.* Let it be admitted that the harm is done not by the living microbe, but by some dead excretion. Still, as there can be no excretion without an excretor, the comma cannot be allowed thus to shirk responsibility. The common law maxim, *qui facit per alium, facit per se,* will hold the principal liable for all the legitimate actions of its representatives.

It is admitted by Klein and his supporters that the poison produced by the bacilli is self-multiplying. Then it must be alive; for a dead excretion has no power of propagation. And if it be alive, it must itself be a microbe, the vicious offspring of the amiable comma. So that at last the contending parties occupy the same platform; one party laying the blame upon the mother microbe, the other party insisting that guilt rests on the wicked daughter.

Too much admiration cannot be felt for the army of patient and zealous investigators who brave danger, who sacrifice ease, who spurn lucrative pursuits in their devoted hunt among uncanny objects for some new minute enemy of the human race. They deserve all the plaudits which they receive.

But does not truth compel the sad confession that bacteriology with all its brilliant discoveries, has furnished little help to what is of the greatest practical importance to physicians and patients: the Art of Healing. The fatal march of consumption has not been arrested, and its treatment has not been even modified by the discovery of the bacillus. The dreadful disease still continues to kill one-sixth of the human race; and its ravages would not cease even if the bacillus could be exterminated. For consumption exists and runs its deadly course where no tubercles are present.

No new remedy has been suggested by the discovery of the cholera microbe. It is known that this bacillus thrives in alkaline soils, and has its growth and propagation hindered or arrested by acid conditions. But the acid treatment of cholera was employed with some success more than a decade of years before it was known whether the cause of the disease was shaped like a comma or an interrogation point. Ague yielded to Jesuits' bark ages before the bacillus malariæ was dreamed of; and the knowledge that vegetable germs are the fountain and origin of the complaint has not added one jot to our ability to manage it.

These facts are admitted, but they do not detract from the merit of the germ-seekers. No practical—certainly no commensurate—good has come from Arctic explorations. But Franklin and Kane and Greeley, and all their noble associates, deserve honor and reward not for what they achieved, but for what they attempted. Let the spirit of inquiry suffer no discouragement.

The ugly duckling becomes at length the beautiful and graceful swan. The helpless and useless babe

grows into vigorous manhood in time. Through untold ages the sun has been sending to us line upon line ardently acknowledging our good mother earth as his beloved daughter. The messages were unseen by dull mortal eyes till the Bavarian optician, Fraunhofer, came. He discovered the affectionate hieroglyphics in the solar spectrum, but he could not decipher them. He did what he could. He patiently observed and measured and honestly recorded five hundred and seventy-six apparently meaningless lines. And then he waited for the advent of some Champollion capable of furnishing an interpretation. For forty-five years the epistle remained untranslated. Then Kirchhoff, another German, after much patient search revealed to us the kinship of things terrestrial and celestial. Some good, let us hope, will yet come from the cruel and murderous Arctic explorations.

In some way Mycology may aid in preventing and curing disease. Let us labor and wait. But may we not, with all due humility and deference, suggest to our friends whose eyes are worn out looking through their fiftieth-inch objectives that the shape of the microbes, or even their behavior in cultivation fluids is no longer of supreme importance. Is it not time that a little more attention be directed towards discoveries in prophylaxis and therapeutics. Already the antiseptic precautions introduced by Lister have been of incalculable benefit to surgery. Those who decry Listerism, and claim that cleanliness is sufficient, actually pay tribute to the genius of the great antiseptic apostle. Dirt is harmful only because it contains noxious germs; cleanliness to the extent that excludes these germs is asepticism; and asepticism is Listerism.

We await the advent of some medical Joseph who shall discover a germicide which is not a homicide at the same time.

These remarks are introductory to my brief and fragmentary address.

THE ETIOLOGY OF DISEASE.

The mycologist is inclined to claim that a legion of diseases arise from microörganisms. Included among them are the exanthems, typhus, typhoid, and yellow fevers, diphtheria and mumps, tuberculosis, venereal indiscretions, and cholera asphyxia. Included also are complaints like pneumonia, whose contagiousness is not generally admitted, and rheumatic and malarial fevers which are non-contagious. It is not pretended that the specific *contagium vivum* of every one of these complaints has been demonstrated by propagation experiments. But as the spirillum of anthrax, the micrococcus of diphtheria, the bacillus of phthisis and cholera have been captured and exhibited and caused to multiply, the inference—conjecture, if you choose—does not seem forced that all diseases which resemble these specified in having contagious properties, or a period of incubation, or a definite cycle, or capabilities of preventing subsequent attacks, have as their causes certain minute, even if undiscovered, organisms. Further observations will be made. Alleged discoveries will be subjected to rigorous investigation. The false will be brushed away. The truth will be established. Carping criticism will yield to peaceful acquiescence.

The neurologist is confident that a multitude of complaints have their origin in the nervous system. And he has good grounds for his opinion. Fever as a Neurosis is the subject of an able paper by an eminent writer at this very session of our Association. That a high temperature—the highest recorded—has resulted from injuries of the spinal cord—and where the influence of microzymes is excluded—is not a matter of question. In one instance the temperature reached 122° F. and remained for seven weeks between 108° and 118°. The patient was a lady, the result was recovery. An incidental inference, which I will not press, is that if recovery can take place after a continuous average temperature of 115° for nearly two months, it is not the fever which kills or produces rapid softening of the heart and other organs in fatal cases of typhoid. Whether there be special calorific nerves which may be stimulated in moderately severe spinal injuries to increased production of heat, or whether, from continuous compression of the nerves, heat is produced by increased resistance—as in the galvano-cautery—are questions which may merit investigation. Fever, so far as it consists in elevation of temperature, can be a simple neurosis.

That rheumatism involves the nervous system, even if it does not originate in it, may be inferred from the erratic behavior of the joint affections in rheumatic fever, and from the causes of arthritis deformans, which are often grief, prolonged anxiety, and injury or disease of nervous centres, as shown by Charcot, and ably presented by Ord at the last meeting of the British Medical Association. Many cutaneous affections, notably zoster, urticaria, eczema, are of nervous origin. Pneumonia sometimes arises from injury of the brain. Diabetes, both the glucose and the insipid varieties, can be produced, as is well known, by irritating certain nerve centres. Some kidney diseases and liver complaints are the result of persistent nervous disturbance.

The humoral pathologists still adhere to the belief that our physical ailments arise from disorders of the blood. Plethora has its numerous attending evils, congestions, hemorrhages, cardiac disturbances. Anæmia is the prolific parent of a thousand aches and pains; of indigestions, palpitations, mental and physical debility. Blood containing an excess of a certain element causes diabetes. Contaminated with another, it occasions Bright's kidney and diseases of the urinary tract. Rheumatic fever, with endo- and peri-carditis and permanent valvular disease, is produced by the ingestion or injection of a certain acid, and its absorption into the blood, as shown by the experiments of Richardson and Foster. This acid is produced normally from certain elements of the food. It is transformed before reaching the systemic circulation. Produced in excessive quantity, or failing to be transformed, it poisons the blood—as it does when introduced experimentally—and causes rheumatic joint affections and cardiac lesions. As is well known, these endocardial disturbances and valvular injuries are limited almost exclusively to the left heart. The right heart escapes because the acid is normally present there, and so an accustomed stimulant. The transformation is effected in the lungs. In failure of this transformation, the acid passes into the general circulation, and, being an unaccustomed stimulant, poisons the left heart and works its well-known mischief.

Many dermatologists believe that certain cutaneous

affections are caused by impure blood. Eczema is one. The solidists pin their faith to cellular pathology. We need not be confused by this conflict of opinions. Neither of the views is exclusively true; neither is wholly false. Living foreign organisms; the nervous system; effete impurities of the blood; disorder of the minute cells of which every part of the human frame is constructed; each of these may be a factor in the origination of disease; each may be first, or midway, or last, in the vicious circle of causes—the etiological Round Robin.

Germs may develop a countless brood and contaminate the blood, either by their own abnormal presence or by a poison which they exude. This poisoned blood stimulates or obstructs the nervous system, and the heat of fever is developed by the correlation of forces. The presence of certain microbes is made known to the nervous centres. A mandate is sent to the vaso-dilators of the lung; congestion and pneumonitis result. Some irritation at the origin of the vagus produces hyperæmia of the liver, over-production of sugar, impairment of the transforming power, disturbance of the kidney, and diabetes. From disordered digestion, an abnormal condition of the blood may result; the nervous system may become involved. Gout may be a product, sometimes appearing in its true character as a torturing joint affliction, and sometimes masquerading as eczema or asthma.

The blood, the nerves, the cells, the microbes, are thus seen to have a pathogenic partnership harmony, and to be interdependent. Without the aid of the nervous system there could be no fever. But the nervous system alone can never originate any specific fever, typhoid, or rheumatic, or pneumonic. Rheumatism is intimately associated with a poison in the blood, but the excessive production of the poison and its circulation in unwonted vessels are the result of abnormal nervous influence.

From the ovum to the cadaver, man is constantly exposed to this conspiracy of morbific influences and agents to destroy him. There are foes without and foes within; foes which march up in front and boldly smite him in the face; foes which approach insidiously and undermine him; foes which are so attractive that he counts them as friends, till he finds himself dangerously smitten under the fifth rib. The destructive influences and agents are in the air he breathes, the food he eats, the water he drinks, and a hundred-fold more in the substitutes for water which he imbibes. These foes are the accidents and sudden dangers which he encounters; the misplaced switch of the railroad; the lurking miasm, the infected air, the defective drainage, the insufficient light which sap the foundations of life. They are the seductive habits and vices which sparkle and smile, and then bite like the serpent and sting like the adder. These morbific foes find access to the citadel of life through sometimes one avenue and sometimes another. This one comes in through the blood which it poisons, that one along the path of the nerves which it throws into abnormal vibrations, and the other creeps from cell to cell corrupting and enfeebling every fibre and tissue. Whatever the manner of entrance, the result is the same: nerves and blood and cells all become at length involved in the mischief.

To counteract these ruinous influences and agents—to fight with greater or less success against the open and concealed enemies, many means of defence and attack are provided. There is wisdom gained by observation and experience. There is the obtainable skill of the sanitarian and physician. There are certain inherent powers of resistance and recovery which, ever on the alert, are more potent protectors than that human wisdom which often sleeps; than that human skill which sometimes gropes and sometimes blunders.

We are familiar with what is called the *vis medicatrix naturæ*. It is a power which is sufficient in many—perhaps most—cases of disease to effect a cure. Sometimes it brings relief while the physician simply watches or gives inert drugs—and claims all the credit. Sometimes it corrects disorders with the well-timed aid of the doctor. Sometimes it triumphs over the combined attack of the disease and the blundering medicine-man. This reparative power is the best friend and ally of the wise physician. It may be too weak to accomplish its purpose, and so may need timely and sufficient aid. It may overdo the matter, and so need wholesome restraint. It may be irregular in its action, and so need careful guidance.

THE VIS MEDICATRIX.

Now while we are familiar with this reparative power, we may not be so attentive to another conservative force which is especially important: The Resisting Power. From the *vis medicatrix* this power differs essentially. One is a restorative force—a tendency to come back to the normal condition after departure from it. The other is the conservative force, which *prevents* departure. A steel spring yields readily to external force, but its elasticity—after the disturbing cause is removed—enables it to resume its original condition. This is the *vis medicatrix*. Granite rock is not easily affected by external violence. Its power of resistance is great. When the force brought to bear upon it is strong enough to cause it to yield, it goes to pieces, having no recuperative power. There may be great toughness combined with great resisting power. The iron-clad vessel when struck by ponderous ball or steel bolt, may be perforated, but it is not hopelessly shattered.

This resisting power is akin to what is called inertia in physics—the tendency of a body in motion to keep going; of a body at rest to remain quiet forever. Light bodies with little substance are easily set in motion, and easily deflected from their course, or arrested in it. A feather can be wafted or stopped by the slightest breath. A cannon ball, an avalanche, are turned aside by no obstacle; they move onward to their destination.

Every human being has more or less of this resisting power. It may be feeble and yet so united to a recuperative force, that the individual possessor manages to get along fairly well. Any trifling mishap or exposure may prostrate him, as a reed may be shaken in a moderate wind; but his elasticity, like that of the reed, brings him up promptly when the storm ceases. He has his frequent ups and downs; we all know many such cases; he is delicate of constitution; he may be like an estimable old lady of my acquaintance, at the point of death at odd spells for thirty years; and yet he lives on by virtue of the *vis medicatrix*, of which he

seems to be composed, till all his acquaintances have passed off the stage of action.

On the other hand, this resisting power may be like that of the granite. Its owner may violate all sanitary laws, may laugh to scorn all counsel about what he should eat or drink, or wherewithal he should be clothed. He may expose himself unprotected to cold and wet. He may go without sleep and food. He may tax stomach and brain and muscle to the utmost. And yet he may remain undisturbed. We know such men—men who guzzle poor whiskey every day, and live to be a hundred years old. We know men of granite constitutions, who prowl around late at night, when they should be snugly in bed; who gormandize, who exercise vigorously all the vices; and yet who remain a standing refutation—as superficial observers think—of all rules for preserving good health. But when some overwhelming calamity comes they are stricken down forever; their first illness is their final one; they crumble to atoms.

In every community are those whose resisting power is so feeble from inheritance or so thoroughly impaired by excesses that they are but walking dead men—apples of Sodom perhaps—fair to look upon, but ashes or putrefaction at the core. They yield to influences which are trivial in their nature, and go into the hands of the undertaker before their neighbors had even heard of their illness. These are children of old, or debauched, or scrofulous parents, whose resisting power is so nearly *nil* that their aspirations to stand with the angels receive early gratification, in spite of all that love and skill can do to keep them away from their heavenly home. We name the messenger who summons them cholera infantum, or tuberculous brain disease, or white swelling; and as parents, while we wonder at the mystery, we bow submissively to Him who gives and then takes again so soon. But as physicians, we are not surprised that diseased and mushroom cells should hasten to early destruction.

No man liveth for himself alone. The good constitution, the strong resisting power of the temperate and upright man is not only a sure personal defence against disease and a guarantee of longevity; it is transmitted to his offspring down to many generations. The dissolute man, broken down with diseases acquired while sowing his wild oats, suffers not alone. If he did, we might view the transaction with mitigated sorrow. He had his coarse enjoyment, and he can afford to reap corruption. But the evil that he does lives after him in the blighted and wretched lives of his innocent children and his children's children.

A priceless inheritance is a strong resisting, combined with a vigorous recuperative power. He who has it and preserves it, and fortifies it, living a clean and active life, eschewing bodily and mental excesses, and clinging to the Divine promises, may bid defiance to disease in its multifarious forms. He need not be afraid for the pestilence that walketh in darkness, nor for the destruction that wasteth at noonday. Free from fear—the greatest depressant—he shall walk unscathed through all perils. A thousand may fall at his side and ten thousand at his right hand, but disaster shall not come nigh him. And even when the onslaught of disease cannot be wholly warded off, the wounds inflicted shall have speedy healing.

MEDICAL PROGRESS.

UNCONTROLLABLE HYSTERICAL VOMITING; CURE BY COCAINE.—PROFESSOR KOHLER has successfully employed cocaine in concentrated solution in several instances with noteworthy results. In one case he, without injury to his patient, sounded and dilated the larynx and trachea after application of the drug. In a second remarkable case, a hysterical woman was attacked with uncontrollable vomiting, from which she became so much reduced that to sustain her it became necessary to resort to peptonized enemata. The first application of the solution of cocaine enabled the woman to partake of liquids, and the second rendered the ingestion of solid food possible. On abandoning the use of the cocaine, the vomiting was at once renewed.—*L'Abeille Médicale*, April 6, 1885.

EARLY RESECTION OF THE LONG BONES DURING GROWTH IN ACUTE OSTEOMYELITIS, WITH SUPPURATION OF THE NEIGHBORING JOINT.—DR. A. CERNÉ, at the last meeting of the French Surgical Congress, read a paper upon the early resection of the long bones during growth in acute osteomyelitis, complicated with suppuration of the neighboring articulation, of which the following are the conclusions:

1. Early resection in acute osteomyelitis during growth may be substituted in nearly every case for which, up to the present time, amputation has been considered necessary.

2. Resection can and should be limited to those parts affected by necrosis, if the disease is limited to the bone.

3. Invasion of the neighboring joint does not constitute a contraindication to the operation, but renders it the more imperative.

RESECTION OF THE HIP IN COXALGIA; ITS INDICATIONS AND ULTERIOR RESULTS.—PROF. EUGENE BŒCKEL, at the meeting of the Congrés Francais de Chirurgie, recently held at Paris, expresses his views as to the operation of resection of the hip in coxalgia, as follows:

1. Suppurative coxalgia in a young subject is never cured except when the head of the bone is luxated or destroyed.

2. The operation of resection is in itself not dangerous, but is influenced or complicated by the general condition.

3. Tuberculosis or meningitis causes the death for the most part in those undergoing the operation for resection, as does it also in those affected by coxalgia.

4. The more opportune and less extended the resection the more perfect and rapid the cure.

5. The arrest of development in favorable cases is slight.

6. After delayed resection such arrest is considerable; also in those cases of suppurative coxalgia whose cure has been extended over some years.

7. Resection is the surest method of curing, quickly and well, a case of suppurative coxalgia.

8. Contraindications to resection are furnished by pronounced tuberculosis of any internal organ. Albuminuria, which is susceptible of cure after resection, is not an absolute contraindication.

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SATURDAY, MAY 2, 1885.

DRY PLEURISIES.

SIR ANDREW CLARK, in London, and DR. J. R. LEAMING, in New York, have on many occasions during the past twenty years insisted on the importance of primitive pleurisies in the natural history of phthisis. The former has recently in his Lumleian Lectures, at the Royal College of Physicians, London, given a full and detailed statement of his views, to which we shall briefly call attention.

A dry pleurisy is defined to be such an "inflammation of the pleura as issues in an exudation of lymph into the substance and upon the surface of the membrane, unaccompanied by an amount of serous effusion sufficient to yield physical signs conclusive of its presence." In the first lecture the clinical aspects are considered and twelve cases are selected for narration, from material which is referred to as embarrassing in its richness. An analysis of these cases makes us question whether all come under the category of *primitive* dry pleurisies. Case II. we should regard as a somewhat anomalous pleuro-pneumonia. In Cases IV., VII., IX., and XI., there seems every probability that the pleurisy was originally *wet*, and that the dulness with retraction of one side resulted from the gradual absorption of the fluid and organization of the thick exudation. Case IX., certainly, with the remnant of an old empyema in the diaphragmatic pleura, communicating with an abscess in the liver, cannot be regarded as one of ordinary plastic pleuritis. Many of the cases were followed for years, which adds greatly to the interest, and they are related in a very pleasant way, so that one does not weary in the perusal.

The second lecture opens with a criticism on the current anatomical description of a lung lobule, and an original account by Sir Andrew, which, so far as we can gather, does not differ essentially from the descriptions criticised, except in discarding the terms *alveolar passage* and *infundibulum*, and the statement that the air cells are cubical, not hemispherical.

Sir Andrew's remarks on the structural character and changes in blood-clot and exuded lymph illustrate what a pathological Rip van Winkle a man may become, engrossed in the cares of practice, for we have here the antiquated assertion of the formation of the fibrous elements directly out of the exudation or from a fibroid basis substance. The exudations are classed under three heads: fibrinous, characterized by the scarcity of cell forms; the croupous, by their abundance and rapid degeneration; and the proliferative, with numerous cells which display active structural development. The two former are accompanied by the phenomena of inflammation, while the proliferative is a textural growth. By a gradual extension of the indurative changes into the lungs, at first along the interlobular septa, then about the vessels and bronchi, and, finally, the alveolar walls, a fibroid condition of the organ is produced. Later changes are the development of bronchectasis, and the destruction of tissue with the formation of cavities and the production of a fibroid phthisical lung. The anatomical picture is, on the whole, faithfully and accurately drawn, but it is too restricted, and we should have liked more information on the differences between *primary* cirrhosis, and that which is an outcome of chronic pleurisy. In the third lecture the clinical features and symptoms are considered, and the local physical signs very fully and ably discussed. Some most interesting points on the history of bronchectasy are dwelt upon at length.

The tubercle bacillus has evidently been a source of not a little worry to Sir Andrew Clark, whose well-known divisions of phthisis into tubercular, pneumonic, and fibroid, have been somewhat disturbed by its advent. He holds, very justly, that its "exclusively causal agency, although extremely plausible, is not conclusively proved;" and, even if the views regarding the unity of phthisis should prevail, the fact remains that there are subsidiary groups which require separate and permanent recognition. "Why," he suggests, "under the generic name bacillary phthisis should we not recognize the subordinate independence of tubercular bacillary phthisis, caseous bacillary phthisis, and fibroid bacillary phthisis?" The contention for non-bacillary ulcerative processes in the lungs appears perfectly well taken.

In these admirable lectures two omissions strike us as being very odd, viz., the absence of any reference to primitive dry tubercular pleurisy which may induce enormous thickening of the membrane, and

last for years before the lung is involved; and secondly, no mention is made of the all important part played by neglected pleurisies and empyemas in the etiology of fibroid phthisis.

For one case in which *primitive* dry pleurisy causes induration of the lung, we should say there are at least a dozen the result of a pleurisy, serous or purulent, left to nature and undergoing resorption only after months of ill-health. Sir Andrew Clark, at the beginning of the first lecture, asked the question, Do primitive dry pleurisies exist? and admitted that their influence in producing secondary disease of the lung had been hotly contested. That they occur with great frequency every one knows, that they may induce fibrosis of the lung we readily allow, but after a tolerably extensive experience we never met among numerous specimens of cirrhosis one which in its etiological and anatomical features, bore out the views of the distinguished Lumleian lecturer.

THE BACILLI OF SYPHILIS.

AT the recent Kongress für Innere Medecin, held at Wiesbaden, LUSTGARTEN, the clinical assistant of Kaposi, described a new microphyte, which, by the aid of a novel process of coloring, he had constantly found in the primary, secondary, and tertiary lesions of syphilis, and which he regards as the cause of that disease.

The bacilli are short, straight, or curved rods, with irregular, undulating, and slightly notched contours, of a deep blue color, and contain from two to four spores. They are never free, but are invariably included in wandering cells, in groups of from two to nine. The cells themselves are rarely found at the centre of the infiltration, but exist in pretty large numbers at its edges, and in the adjacent apparently healthy tissues. Lustgarten has also demonstrated the presence of these bacilli in the spinous cells of the rete Malpighi in papular eruptions, through which he explains the clinical fact that moist papules become contagious when they are deprived of their epithelial investment.

For the information of those of our readers who may desire to enter this special field of investigation, we reproduce the method of staining adopted by Lustgarten: Sections, which have been hardened in alcohol during twelve to twenty-four hours, are placed for two hours in a fluid composed of eleven parts of a concentrated alcoholic solution of gentian violet and one hundred parts of aniline water, at a temperature of 104° F. The sections are then decolorized by washing with absolute alcohol, and next placed for ten seconds in a one and a half per cent. solution of permanganate of potassium, when they are transferred to pure sulphurous acid, and allowed to remain until they are nearly deprived of color. They are then washed with distilled water, reintroduced into the permanganate solution for three or four seconds, and again placed in sulphurous acid. This manœuvre is repeated several times, or until the preparations are entirely colorless, when the water is extracted by alcohol, and the sections mounted in oil of cloves.

From the peculiar tinting reaction of the bacilli, which has not hitherto been observed in other microscopic organisms, Lustgarten assumes that he has discovered a bacillus which stands in the same relation to syphilis that the bacillus tuberculosis does to tubercle. In two of the other infective tumors at least, namely, lepra and tubercle, the virus has been demonstrated to be a rod-shaped bacillus contained in the granulation tissue of the neoplasm, and we have every reason to presume that the syphilitic virus is connected with a particular form of bacillus, although the fact has as yet not been demonstrated. Pure cultures in sterilized gelatine, and possibly other media, as well as direct inoculation, must be practised, before Lustgarten's bacilli are accepted as the cause of syphilis; and, when we bear in mind the failures of Klebs, Ziegler, Von Rinecker, and others in this direction, we must accept his statements with great reserve.

ARSENICAL WALL PAPERS.

THE use of arsenical pigments in coloring wall papers, and many kinds of wearing apparel and other articles, is sufficiently common to warrant the enactment of a law prohibiting the manufacture and sale of articles of domestic use containing poisonous coloring matters, or at least making it compulsory that they should be advertised as containing deleterious matter, so that the purchaser may have full knowledge of the danger which is incurred by their use.

Many continental countries have very rigid regulations on this subject, those of Sweden being by far the most stringent. In England strenuous efforts have been made, but without success, to have a law enacted prohibiting the manufacture, sale, or importation of articles of domestic use, containing arsenical pigments, or containing arsenic in any form. In this country less attention has been given to the subject, but certainly not because there is less need of such a law, for there is every reason to believe that the trade in poisonous articles is extensive. It is only necessary to read the article in the fifth annual report of the State Board of Health, Lunacy, and Charity of Massachusetts, by Professor Edward S. Wood, on "Arsenic as a Domestic Poison," to be convinced of this unwelcome fact. Professor Wood's paper is a valuable supplement to the exhaustive article of Dr. Draper, "On the Evil Effects of the Use of Arsenic in Certain Green Colors," which was published in 1872. It shows how very extensive is the

employment of arsenic in the manufacture of articles intended for domestic use; and that this substance, when used in the manufacture of domestic articles, such as wall papers and clothing, may, and frequently does, cause very distressing symptoms, and sometimes dangerous, and even fatal, poisoning.

According to Professor Wood, the most common source of domestic arsenical poisoning is wall paper, which frequently contains an excessive amount of arsenic in the coloring matter. Green papers were at one time supposed to be the most dangerous papers on account of the use of certain preparations of arsenic in the coloring matter; but at the present time, although many of these papers contain dangerous pigments, arsenic is more frequently found in wall paper of other colors. This is accounted for on the supposition that the public have been specially cautioned in regard to the poisonous character of green papers and pigments, and have avoided them unless assured that they are not arsenical. Manufacturers have, therefore, been obliged to produce these colors without using the objectionable arsenical coloring matter. It is stated that red and blue papers are more frequently arsenical than the green. Even the delicate French grays contain a very considerable amount of arsenic. In fact, papers of any color or any shade may contain arsenic; and, therefore, color is not a reliable guide in distinguishing a poisonous from a non-poisonous paper.

The examination of a large number of specimens by Professor Wood developed some startling results. A number of the specimens contained as many as six grains of arsenic per square yard; a large number of them over one grain per square yard. One specimen of the so-called "glazed and plated" papers, so much used by children in kindergarten schools, contained as much as 55.88 grains of arsenic per square yard. It was found that no reliance could be placed on the color as indicating whether a paper was poisonous or not, and that the price of a paper is no security against its poisonous nature, as some of the most expensive papers contain a large amount of arsenic, while some cheap papers have none at all.

Poisoning is caused not only by the inhalation or contact with the body of arsenical dust, but also by the absorption by the skin and lungs of a very poisonous gas, arseniuretted hydrogen, which is evolved by the decomposition which takes place when arsenic is in contact with moist organic matter, such as the size or other vehicle for the color.

The symptoms of arsenical poison are difficult to recognize, as they simulate those of other diseases, and doubtless many cases of illness due to this cause are ascribed to other agencies, and their true character overlooked, because it does not occur to the medical adviser to think of the arsenic in domestic articles as the source of the trouble.

Since the evil is widespread, what defence have the public against it? Manifestly the employment of arsenical pigments in every shape in domestic articles should be prohibited. This is a matter which should claim the prompt and careful attention of the legislature. Pending some definite legislation on the subject, it would be well to require from the vendors of wall papers a reliable test showing that the papers contain no arsenic or other poisonous matter, since mere inquiry would be met with the assurance, given in good faith, that the article was harmless,—an assurance which is entirely untrustworthy. It is not practicable for the purchaser to institute a test on his own account, though this is done in some cases, and the security thus obtained amply repays the trouble and expense. Some firms, with commendable regard for the public safety, require the products to be submitted to exacting chemical tests, and thus are enabled to assure their patrons of the harmless nature of their stock. This practice, however, cannot be expected to be universally adopted, and therefore the self-imposed labor of some manufacturers should be supplemented by a general investigation by the analyst of the health board, who can render a valuable service to the public by a searching examination of the stock of paper-hangings offered for sale.

The physician should not forget the possibility of wall paper poisoning, and, in ill-defined and suspicious cases of sickness, he would do well to cause the wall paper to be submitted to a chemical test.

THE CHAIR OF CHEMISTRY IN THE JEFFERSON MEDICAL COLLEGE.

WE have the pleasure to inform our readers that Dr. J. W. Holland, of the University of Louisville, was elected on Monday last, Professor of Medical Chemistry and Toxicology in the Jefferson Medical College. Prof. Mallet, who was elected in September, 1884, in succession to the late Professor Robert E. Rogers, returns to the University of Virginia, from which he has not been able to separate himself permanently, although he has made two efforts to do so.

Dr. Holland has had thirteen years' experience as a teacher of medical chemistry, having been appointed to that chair in the University of Louisville, on the retirement of Prof. J. Lawrence Smith, whose assistant he had been. Dr. Holland is an admirable speaker and lecturer, and a gentleman of superior culture and of refined manners. His address before the Jefferson Alumni Association, at the last annual meeting was a finished and scholarly production, and did justice to his high reputation as a speaker.

The college to which he comes, and the medical profession amongst whom his lot will be cast hereafter, are to be congratulated on this agreeable addition to their resources

SOCIETY PROCEEDINGS.

THE AMERICAN MEDICAL ASSOCIATION.

Thirty-sixth Annual Meeting, held at New Orleans, April 28, 29, 30, and May 1, 1885.

(*By Telegraph.*)

(Specially reported for THE MEDICAL NEWS.)

TUESDAY, APRIL 28TH.—FIRST DAY.

THE Thirty-sixth Annual Session of the American Medical Association was called to order at 11 o'clock in Tulane Hall, in the City of New Orleans, by Samuel Logan, M.D., Chairman of the Committee of Arrangements. After prayer, DR. HENRY F. CAMPBELL, of Georgia, the PRESIDENT-ELECT, was introduced and took the Chair.

DR. LOGAN, on behalf of the medical profession and the citizens of New Orleans, then delivered a cordial and eloquent *Address of Welcome.*

The former Presidents and Vice-Presidents of the Association were invited to seats upon the platform.

DR. HENRY F. CAMPBELL then delivered the

PRESIDENT'S ADDRESS.

(See page 477.)

DR. I. N. QUIMBY, of New Jersey, moved that a committee of five be appointed to consider the suggestions contained in the President's Address. Adopted.

The report of the Special Committee appointed at the last meeting to take such action as it might deem proper regarding the

DEATH OF DR. SAMUEL D. GROSS,

was presented, in behalf of DR. AUSTIN FLINT, Chairman, by Dr. T. G. Richardson, of New Orleans. The report submitted some reflections on his life—a life memorable for services in behalf of medicine and the medical profession; a life precious as an example; and a character which inspires esteem and affection.

The life of Prof. Gross, from the beginning to the end of his long professional career, was a life of work—work as a student, a writer, a teacher, and a practitioner. From first to last he was a diligent student. His pen was never idle, and the six editions of his great work, *A System of Surgery*, represent an immensity of labor. At the outset of his professional life he resolved to become a medical teacher, and in many respects he was a model teacher. As a speaker, he was fluent, deliberate, clear, and emphatic. His tall, commanding figure, his clear voice, his zealous manner, all contributed to render his teaching effective, but his pre-eminent success was an outcome of his love of the labor, and a deep sense of the responsibility which the duties of a teacher involve. As a practitioner, his characteristics, irrespective of his ability and skill, were attentiveness and a deep interest in his cases, conjoined with geniality and kindness.

Turning from the life-picture of Prof. Gross in its professional aspects, the contemplation of his character as a man awakens higher sentiments than admiration. As a student, author, teacher, and practitioner, he was grand, but it is more pleasing to associate his memory with his domestic and social relations. We cannot but admire the achievements of his intellect, but the excellency of his heart inspired affection and love. We shall see him no more in this world, but his life-work and his character death cannot destroy. These remain a priceless legacy to the profession which he loved, and which will ever hold his memory in grateful remembrance.

DR. J. S. BILLINGS, U. S. A., in behalf of DR. AUSTIN FLINT, of New York, who was unavoidably absent, presented a report from the Committee to secure a Congressional appropriation for a fire-proof building for the

ARMY MEDICAL MUSEUM AND LIBRARY.

He stated that through the efforts of the Committee and the individual aid of the members of the Association, Congress, after having had the subject under consideration for four years, at its last session granted the requisite appropriation for the erection of the building, and the work will be commenced at once. The building will be located on the Smithsonian grounds, near the National Museum, and will be a plain but substantial structure. On behalf of the Surgeon-General, he extended thanks to the Committee and to the Association for their confidence in the present management of the Library and Museum, as shown by their continued and earnest endeavor to secure this appropriation.

DR. BILLINGS also, in behalf of Dr. Flint, Chairman of the Committee appointed at the last meeting to present at Copenhagen an invitation, "on behalf of the Medical Profession of the United States," to

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to meet in Washington, in 1887, with power, if accepted, to make all necessary arrangements therefor, reported that the invitation had been tendered and accepted; that meetings of the Committee had been held in Copenhagen in August, in New York in October, and in Washington in November, and the result of their preliminary work was stated. He further stated, that the Committee expected to be prepared to present a full programme for the Congress at the next meeting of the Association.

DR. J. M. KELLER, of Arkansas, moved that the consideration of the report be made the special order for Wednesday, at 12 o'clock.

DR. A. L. GIHON, U. S. N., presented, through the Secretary, a report of the Committee appointed to consider the advisability of the erection, in the City of Washington, by the Association of a

STATUE OF DR. BENJAMIN RUSH.

Consideration of the report was made a special order of business for Friday.

MEMBERS BY INVITATION.

On motion, Drs. Edward Jones, A. B. Miles, C. J. Rickham, of New Orleans, A. E. Foote, of Philadelphia, J. G. Ganthreaux, of Louisiana, and James R. Scarborough, of Kentucky, were invited to seats on the floor.

THE DISCOVERY OF ANÆSTHESIA.

THE SOUTH CAROLINA MEDICAL ASSOCIATION presented a communication stating that at its meeting in 1884, the following resolution was adopted:

Resolved, That the delegates from this Association be requested to present to the American Medical Associa-

tion at its next session, the Report of the Committee on the Discovery of Sulphuric Ether, made to the Association at its last session, and request that body to take such action on the subject of the report, as they in their judgment may determine in view of the claims therein set forth.

DR. R. BEVERLY COLE, of California, remarked that the importance of the resolution rendered it deserving of careful attention, and he moved its reference to the Section on Practice of Medicine with a request for a report. Adopted.

WEDNESDAY, APRIL 29TH.—MORNING SESSION.

After prayer, and the reading of a telegram from ex-President William O. Baldwin, of Alabama, regretting his inability to be present, the Committee of Arrangements presented a further report, and the Secretary announced the names of the members of the Nominating Committee.

DR. H. D. DIDAMA, of Syracuse, N. Y., then delivered

THE ADDRESS IN MEDICINE.

(See page 484.)

DR. R. STANSBURY SUTTON, of Pittsburg, delivered

THE ADDRESS IN OBSTETRICS,

which will appear in full in THE MEDICAL NEWS of next week.

DR. W. C. VAN BIBBER, of Maryland, then made some suggestions in regard to the

CONSTRUCTION OF A HEALTH CITY IN FLORIDA.

Before he had completed his remarks the order of the day was called for, and his paper was referred to the Section on State Medicine.

The consideration of the report of the Committee on Organization of

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was then announced to be in order.

DR. J. V. SHOEMAKER, of Pennsylvania, protested against the acceptance of the report, and stated that the American members who were present at Copenhagen had been entirely ignored by the Committee. He declared that the advocates of the New Code had given the Committee to understand that they must be recognized. The Committee had joined hands with these men, and had elected themselves to the most prominent offices of the Congress. He asked whether the Association had authorized this Committee to elect officers for the Congress. The members of this Committee had ignored the Association, and they have made fun of it for the last ten or twelve years. He asked what was meant by the statement that a complete programme would be presented at the next meeting? It meant the Councils of the Sections would be filled by a clique, and then those who had been left out would be told that there was no more room.

DR. F. E. DANIEL, of Fort Worth, Texas, offered the following preamble and resolution:

Whereas, At the last meeting of the American Medical Association a committee was appointed to confer with the International Medical Congress, at Copenhagen, with a view to securing the next meeting of that body in 1887 at Washington, and to arrange for the said meeting; and

Whereas, This Committee, after accomplishing this object, have proceeded, without authority from this body, to appoint the officers of the Congress, which have been published in detail in the Journal of the Association and other publications, thus giving the aspect of authoritative action on behalf of this Association; and

Whereas, This Association recognizes the Committee as a Committee of Arrangements only, and in so far as the duties of the Committee have been performed, it declines to endorse the said appointments; therefore,

Resolved, That the Committee on Nominations be instructed to prepare and present to the Association nominations for the officers of the Congress and its various Sections.

DR. J. S. BILLINGS, U.S.A., expressed surprise at this movement. The statement which had just been made, that the Committee was threatened by New Code men, or that any bargaining was had with them, or anyone else, was totally and absolutely false. No New Code men were consulted by the Committee, or had any knowledge of the preliminary work at Copenhagen. He called attention to the resolution of last year which appointed the Committee, and gave it the power—if the invitation was accepted—to add to its membership, to perfect its organization, to elect its officers, and to proceed to act as an Executive Committee, with full power to fix the time and to make all necessary and suitable arrangements for the meeting, and to solicit funds for this purpose.

This Committee, consisting of Drs. Austin Flint, of New York; Henry F. Campbell, of Georgia; L. A. Sayre, of New York; I. Minis Hays, of Philadelphia; Christopher Johnston, of Baltimore; George J. Engelmann, of St. Louis; J. M. Browne, U. S. N.; and J. S. Billings, U. S. A., presented the invitation at Copenhagen, and, upon its acceptance, were constituted the Organizing Committee of the Congress. This Committee, under the power given it, enlarged its number to twenty-five, so that it should thus be thoroughly representative of every section of the country. It then proceeded with the necessary preliminary work for the organization of the Congress, which was done, thus early, after conference, and in accordance with the advice and experience of the Committee of Arrangements of both the London and Copenhagen Congresses.

One fact he desired to impress upon the Association, that whether the Committee had acted erroneously or not, it had acted to the best of its ability and with pure and honest motives, and the character of its members was the best guarantee of his assertion. As a member of the Association, he advised that no hasty action should be taken to overthrow the reported work of the Committee, because such action would cause an unfortunate delay in the organization of the Congress, and was calculated to create an unfavorable impression abroad.

DR. J. F. GABRIEL, of Piqua, Ohio, complained that he had not been consulted at Copenhagen by the Committee.

DR. J. M. KELLER, of Hot Springs, Arkansas, considered that the Committee was responsible to the Association for its action, and it had overlooked its responsibility. He offered the following amendment to Dr. Daniel's motion:

Resolved, That the Committee appointed to arrange for the meeting of the International Medical Congress in Washington in 1887, be enlarged by the addition of thirty-eight members, one from each State and territory, the District of Columbia, and the Army and Navy, to be appointed by the Chair. That the Committee thus enlarged proceed at once to review, alter, and amend the action of the present Committee as it may deem best.

He stated that the enlarged Committee should take into consideration what had been said in the discussion, and it should place no man in any position who is in direct opposition to the Code of Ethics of the American Medical Association.

DR. R. BEVERLY COLE, of California, in seconding the amendment, said that in his opinion the Committee had erred in its action after inviting the Congress, but he was too cosmopolitan to accuse men of such high standing of participation in any but honorable procedures, but he was strongly opposed to giving positions of honor to any New Code men. He had always been taught to reverence Eastern men, and he still reverenced them, but too much exaltation had made them arrogant. He hoped that, if the resolution were adopted, the selections and appointments already made would be revised, but that the whole preliminary work of organization would not be undone.

DR. WILLIS P. KING, of Sedalia, Mo., said that he could not accuse of dishonesty such men as compose this Committee, but they had considered only the great North and East, neglecting the West and South. He was fully in accord with the spirit of the resolution offered, especially as regards the decapitation of New Code men.

DR. J. V. SHOEMAKER, of Pennsylvania, said that New Code men had made threats at Copenhagen in his presence, hence the statement that he had made was true, as men who made these threats are now on the Committee.

DR. D. D. SAUNDERS, of Memphis, Tenn., objected to any action which would overturn the regular, systematic arrangements which had already been made, which would be the effect of rejecting the report. He moved as an amendment, That the report of the Committee be accepted and the Committee continued.

DR. J. B. ROBERTS, of Philadelphia, said that he could speak on the subject—perhaps from a standpoint that the majority could not,—for, although a Philadelphian, he was acquainted personally with but a single member of the Committee; the remainder he knew, as everyone does, by reputation. He could advocate the endorsement of the action of the Committee without the bias of interest or personal friendships.

The officers selected by the Committee would, by their reputations, give character to the Congress in foreign countries. He thought, that as successful an International Congress could be held there to-day, as would be held at Washington, in 1887, if the work of the Committee was overruled. If it was the success of the Congress which was desired, he thought it would be better to endorse the action of the Committee,—even if it had exceeded its authority,—than to make public the fact that dissension and dissatisfaction exist at home.

DR. W. N. SMART, of Grand Haven, Mich., believed that the Committee had exceeded its power, and that the Association, without question, should proceed to endorse what is proper in its action and to correct its errors.

A vote was then taken on Dr. Saunders's resolution to accept the report—yeas 88; nays 129.

Dr. Keller's amendment was then adopted: yeas 131; nays 92.

DR. W. A. BYRD, of Quincy, Illinois, moved, as an amendment, that members of the Committee from the States represented at the meeting shall be appointed by the delegations, and those not represented shall be appointed by the President. The original resolution, as thus amended, was then adopted.

THURSDAY, APRIL 30TH.—THIRD DAY.

The session was opened with prayer. The Committee of Arrangements submitted an additional report, and the reading of the roll of members was, on motion, dispensed with.

THE AMENDMENT TO THE BY-LAWS

offered by Dr. Foster Pratt, of Mich., last year, that each Section shall, in the future, elect its own officers, was called up.

DR. A. S. PURDY, of New York, thought that the effect of the amendment would be to split the Association into so many smaller Associations.

DR. N. S. DAVIS, of Illinois, thought that the amendment was defective, inasmuch as it did not specify the time of election.

On motion, its further consideration was postponed until next year.

DR. N. S. DAVIS, on behalf of the

COMMITTEE ON METEOROLOGICAL CONDITIONS,

and their relations to the prevalence of diseases, reported that the Committee had endeavored to secure full reports from the twelve principal cities of the Union through the official bureaus. It had made a special study of ozone production and its value, and also of its tests. Of these, Schönbein's paper is the best, but it reacts to other agents. Thallium was found to be very sensitive. Observations were interrupted in some cities by changes of residence of observers. Physicians were requested faithfully to record the beginning of all epidemics. He said it was difficult to secure such service, as many promise and do not perform; yet he thought that accumulating material will permit the Committee in after years to report conclusions of value. The report was accepted.

DR. DAVIS also presented a report from the Committee on the

COLLECTIVE INVESTIGATION OF DISEASE,

which was appointed to act in coöperation with the Committee of the British Medical Association. He stated that at the International Medical Congress held at Copenhagen, an International Committee had been appointed with members from Denmark, Sweden, Russia, Germany, France, and England, and North and South America. A sub-committee had been appointed to consider subjects for consideration and to tabulate a programme to be distributed throughout the world. The Committee had decided that few questions should be asked, that they should be simple in character, and that they should relate, 1st, to geographical distribution; 2d, to prevalence of diseases in certain localities; 3d, to other etiological factors not so connected.

The report asked that the Committee should be continued, with instructions to urge upon other societies to take up the work. Several States, among which are Illinois and Pennsylvania, have already done so.

DR. DAVIS, from the Special Committee to report Explanatory Resolutions of Certain Sections of

THE CODE OF ETHICS,

stated that the Committee had given the subject due consideration, and respectfully submitted the following brief report in the form of preamble and resolutions:

Whereas, Persistent misrepresentations have been, and still are being made concerning the provisions of the Code of Ethics of the American Medical Association, which many, even in the ranks of the profession, are led to believe—as, for instance, that the Code excludes persons from professional recognition simply because of difference of opinion on doctrines—therefore

Resolved, First, that Clause I., Article IV., of the National Code of Medical Ethics, is not to be interpreted as excluding from professional fellowship on the ground of difference in doctrine or belief, those who in other respects are entitled to be members of the regular medical profession. Neither is there any other article or clause in the said Code of Ethics that interferes with the most perfect liberty of individual opinion and practice.

Second, That it constitutes voluntary disconnection or withdrawal from the medical profession proper, to assume a title indicating to the public an exclusive or a sectarian system of practice, or to belong to an association or party antagonistic to the general medical profession.

Third, That there is no provision in the National Code of Medical Ethics in any wise inconsistent with the broadest dictates of humanity, and that the article of the Code which relates to consultations cannot be correctly interpreted as interdicting under any circumstances the rendering of professional services whenever there is pressing or immediate need of them; on the contrary, to meet promptly the emergencies of disease, of accident, and to give a helping hand without unnecessary delay is a duty fully enjoined on every member of the profession, both by the letter and the spirit of the entire Code. But no such emergencies or circumstances can make it necessary or proper to enter into formal professional consultations with those who voluntarily have disconnected themselves from the regular medical profession in the manner indicated by the preceding resolution. Adopted.

DR. DUNCAN EVE, of Tennessee, then delivered the

ADDRESS IN SURGERY.

He reviewed many points in the history of surgery from the most ancient to the present time. He dwelt upon the improvement in the treatment of fractures of the skull, cleft palate, and vesical calculi, and in the application of orthopædic apparatus. The address closed with an eloquent eulogy upon the late Dr. Gross.

THE TREASURER'S REPORT

showed a balance of $932.11, and exhibited an increase in the receipts over last year of $320. The provisions made last year for the increase of membership have added one hundred and twenty-five names to the roll.

THE COMMITTEE ON PUBLICATION

presented their report, in which they stated that they had done all in their power with the small means at their disposal. They wished to place on record their high appreciation of the services of Dr. Davis as editor. The journal is free from debt. The number of members entitled to receive it is 3050, the number of subscribers is 850, and the exchanges and advertisers require 120 more. The total number of copies published is 4200, and the probable income is not much less than $6000. The total income from dues is $21,000. The expenses are $12,000, not including the expenses of the editorial office. The Committee concluded to retain the publication at Chicago, and had unanimously requested Dr. Davis to continue as editor, which he has consented to do under certain conditions.

DR. DAVIS spoke at length of the difficulties in the way of conducting the journal, and advised the exercise of prudence and patience, with a careful husbanding of resources. He opposed increasing the annual dues, as it would have the effect of decreasing the number of members—especially of new members. He said that with application and patience in ten years the *Journal* would stand in the lead.

DR. HARVEY REED, of Ohio, moved that the Association offer

PRIZES

for the first and second best papers containing original research, presented in each Section yearly. Adopted.

DR. J. B. ROBERTS, of Philadelphia, from the Section on State Medicine, offered a resolution recommending the appointment in each State of an examining board whose certificate shall be a license to practise. Laid on the table temporarily.

The Committee appointed to consider the advisability of erecting

A MONUMENT TO BENJAMIN RUSH

in the city of Washington, recommended that such monument be erected by dollar subscriptions, and provided for the appointment of a Committee to carry out the object of the resolution.

The Nominating Committee then presented the following list of

OFFICERS FOR THE ENSUING YEAR:

President.—William Brodie, M.D., of Michigan.

Vice-Presidents.—Samuel Logan, M.D., of Louisiana; A. Y. P. Garnett, M.D., of the District of Columbia; Charles Alexander, M.D., of Wisconsin; and W. F. Peck, M.D., of Iowa.

Section of Medicine.—J. T. Whittaker, M.D., of Ohio, Chairman; B. L. Coleman, M.D., of Kentucky, Secretary.

Section of Obstetrics.—Seth C. Gordon, M.D., of Maine, Chairman; J. F. Y. Paine, M.D., of Texas, Secretary.

Section of Surgery.—N. Senn, M.D., of Wisconsin, Chairman; H. H. Mudd, M.D., of St. Louis, Secretary.

Section of Ophthalmology.—Eugene Smith, M.D., of Michigan, Chairman; J. F. Fulton, M.D., of Minnesota, Secretary.

Section of Diseases of Children.—W. D. Haggard, M.D., of Tennessee, Chairman; W. B. Lawrence, M.D., of Arkansas, Secretary.

Section of State Medicine.—J. H. Rauch, M.D., of Illinois, Chairman; F. E. Daniel, M.D., of Texas, Secretary.

Section of Oral and Dental Surgery.—J. S. Marshall, M.D., of Illinois, Chairman; A. E. Baldwin, M.D., of Illinois, Secretary.

Committee on Necrology.—J. M. Toner, M.D., of the District of Columbia, Chairman.

Judicial Council.—R. A. Kinloch, M.D., of South Carolina; D. D. Saunders, M.D., of Tennessee; T. G. Richardson, M.D., of Louisiana; G. A. Ketchum, M.D., of Alabama; George Baird, M.D., of West Virginia; J. M. Toner, M.D., of the District of Columbia; A. M. Pollock, M.D., of Pennsylvania.

Time and place of next meeting.—St. Louis, on the first Tuesday in May, 1886.

AMERICAN SURGICAL ASSOCIATION.

Sixth Annual Session held in Washington, D. C., April 21, 22, 23, 24, 1885.

(Specially reported for THE MEDICAL NEWS.)

WEDNESDAY, APRIL 22D.—MORNING SESSION.

IN continuation of the discussion on Dr. Roberts's paper on

THE FIELD AND LIMITATION OF THE OPERATIVE SURGERY OF THE HUMAN BRAIN,

DR. DAVID PRINCE, of Jacksonville, Ill., said that he agreed in the main with the principles of the paper. From being one of the most dangerous, trephining has become, since the introduction of antiseptic methods of treatment, one of the safest operations of surgery. He could call upon his experience with regard to the difference between the results under the old and the new methods of treatment. He had never seen serious complications as the result of the operation. With reference to the statement that the patient could go home immediately after having his head trephined, he thought the paper misleading, for there is nothing so important to an individual after a serious operation like this as rest. Even where the patient was in perfect health prior to the operation, rest for a considerable period should be enjoined.

DR. JOHN H. BRINTON, of Philadelphia, spoke with reference to the first paragraph of the paper, "The complexus of symptoms called 'compression of the brain,' is not due so much to displacing pressure exerted on the brain substance as it is to some form or degree of intracranial inflammation." Is that, he said, altogether true? Is it not calculated to carry with it some misunderstanding? I do not think that we can say that these symptoms are due, to any great extent, to intracranial inflammation. The displacing pressure is more probably the point to which we look, and to which we should address our treatment. In a case seen by him, an individual, seventeen or nineteen years of age, had received a depressed fracture of the frontal bone extending almost from one external angular process to the other. One fragment overlapped the other. With a Hey's saw, he removed a considerable portion of the protruding bone, and coaptated the edges, the bones slipping into place with a snap. All the symptoms were immediately relieved, and the patient conversed rationally with him almost before the completion of the operation. He believed in the early use of the trephine, but not because he considered it a trivial operation.

One of the previous speakers had pronounced the lateral ligature of a sinus an impossibility. This was a mistake. In a case that came under his observation, in which a child's skull had been fractured by the kick of a horse, he had succeeded in tying the lateral sinus laterally. The difficulty of the operation disappears when a large enough piece of the bone is removed to enable the operator to get rightly at the vessel. He did not think that there was much difficulty in arriving at the proper line of treatment in cases of compound fracture, whether the symptoms be mild or grave. The only cases in which there is doubt are those in which an individual is suffering from a simple depressed fracture with few or no symptoms. Such a case may to-day have no symptoms, but to-morrow, or next day, he may have acute traumatic encephalitis and die, or he may pass out from observation for a long time, and eventually suffer from epilepsy. What is the treatment? This has been well summed up by a distinguished author who was well known to the Association, when he says, in his *System of Surgery*, "Surgeons have been much divided in opinion, some favoring, others condemning operative interference. The judicious practitioner will be governed in the choice of his remedies by the circumstances of each individual case. When the fracture is of small extent, free from comminution, and without much depression, the only rational plan is not to attempt elevation, but to treat the patient upon general principles, using depletion by the lancet, leeches, and other means, with a view of preventing inflammation and other evil consequences. If, on the other hand, the bone is forced down considerably, so as to impinge very decidedly upon the brain, or if it be comminuted or jagged at the edges, the sooner it is raised or removed the better, since if it be allowed to remain it cannot fail to become a source of trouble, either by exciting inflammation, or by causing serious secondary effects. I am fully, indeed painfully, sensible of the responsibility which I incur in giving this view; but I feel satisfied, after mature consideration, aided by the light of experience, that it is the best, if not the only proper course to be pursued under the circumstances. A man laboring under such an affliction is never free from danger; he may get well, or be well to all appearance, and yet be only partially cured, subject at any moment to have his mind and life imperilled by the broken bone. It is like the sword of the tyrant suspended over the head of his subject." It seemed to Dr. Brinton that there is in that lesson but little to be added and but little to be taken away.

DR. T. A. MCGRAW, of Detroit, remarked that it had been stated that the brain will accommodate itself to a reasonable amount of pressure. That is true of children, but it is hardly so true of adults. He then reported the case of a negro painter, who fell from a scaffold, sustaining a simple fracture of the skull with smooth edges. A year elapsed before any symptoms arose; then the individual began to become giddy whenever he ascended to a scaffold, and was obliged to abandon his employment. Finally, he came to the hospital, and into the care of the speaker. The trephine

was applied, the depressed bone removed, and all the symptoms immediately disappeared. This he considered most certainly a case of simple and uncomplicated compression. He referred further to what had been said by a speaker of the day previous, that after the symptoms of inflammation have developed, operative procedure is of no value, and remarked that he must take exception to that opinion. If you have a felon, you lance it to relieve the tension, before suppuration has really occurred; the same may be done in these cases for the same purpose.

DR. P. S. CONNER, of Cincinnati, remarked that the Fellows appeared to be of one accord upon the general statements of the paper, namely, that for an open fracture of the skull, the trephine should be employed. Where we trephine in the absence of an open wound, we take away the chances for the case to become a severe one. He did not consider the operation a trivial one, however, for the apparently most trivial cases have a mortality of 10 or more per cent. But we know that the worst cases are those in which the injury produced little damage of the outer table, at the same time producing serious fracture of the inner table. Under such circumstances some individuals recover much more favorably when the damaged portion of bone is removed than if it is allowed to remain. While the laceration of the soft parts adds some danger to the case, and while it is better to have the wound remain a closed one, the danger is so little increased by converting it into an open wound that we should not hesitate in doing so, if we can do good by it.

With reference to the exploration of gunshot wounds of the cranium, he expressed surprise at the confidence of some of the speakers of yesterday. It is not a simple matter for the surgeon, and especially an inexperienced one to push probes into the skull. It is sometimes impossible to follow the course of a bullet, for we have no means of knowing what direction it will take. Besides we are told of late that the bullet, or the spicula of bone that are sent in all directions through the brain, do no harm, but that it is the entrance of germs that cause irritation. This, he considered erroneous, and that there is always danger from laceration of the brain-substance. As a rule, however, a very large amount of the vault of the cranium has to be depressed before there will be produced any symptoms of compression. It is estimated that from a twelfth to an eighth of the vault must be depressed before these symptoms will arise. In most cases we will find that other causes, as a blood-clot for instance, are making the compression. Between the ages of eight and twenty, a considerable compression can be made without danger. While all believe in prompt operations, we are all ready to wait and watch, for if too hasty operations are performed, it is clear that some cases will die that would otherwise recover.

DR. N. P. DANDRIDGE, of Cincinnati, reported a case that came under his observation during the late riots in Cincinnati. A German was struck on the right side of the head by a bullet, on a level with the median line and about two inches from it. He was taken at first to the hospital in an unconscious state, but was removed next day to his home, and he did not again see him until six weeks after. He then found a linear fracture without evident depression. The symptoms which were present were a paralysis of the forearm of the opposite (left) side, and a frequent twitching of the face, occurring at short intervals without unconsciousness. The man had not fully recovered his intellectual powers, but was able to take nourishment, and was improving in general condition. Following the accident there was complete unconsciousness, lasting for some hours, and at the time when he saw him again, the patient was not able to recall what had happened during the first few days after the injury.

This was a case of compound fracture of the skull over the motor area, followed by a paralysis of the muscles of the opposite side, corresponding to the centres which we have learned lie under the point of injury. Of course, the question of operative procedure at once arose. But as the case was progressing so favorably without aid, it was decided not to attempt interference. In the course of a few days, the spasm ceased entirely, and the man made a good recovery, the paralysis of the forearm entirely disappearing in the course of three or four weeks, leaving only slight numbness of the little finger which is still present after the lapse of a year. Had he seen the case at the start, he thought that he would have been inclined to apply the trephine at once and elevate the depressed bone.

With regard to the brain symptoms as a guide to the resort to operative procedure, he did not think sufficient stress had been placed upon the difference in the severity of the symptoms corresponding to the differences in severity of the injury. If we were to wait until the appearance of symptoms after fracture of the frontal bone, we would often wait until permanent damage had occurred. The question of operative procedure is to be decided, in many cases, very largely by the seat of the fracture.

DR. B. A. WATSON, of Jersey City, reported a case illustrative of the power of the brain to accommodate itself to pressure. A case was brought to him with a depressed fracture of the inferior angle of the right parietal bone, twelve hours after the receipt of the injury, still unconscious and incapable of being aroused. He was able distinctly to locate a fracture of the external table. He hesitated somewhat with regard to the procedure to be adopted, but finally determined not to interfere. The individual suffered for three weeks from acute delirium, then gradually regained his senses. Within six weeks he had so far recovered that there was left only a paresis of the side of the face and a partial aphasia. A year and a half after the receipt of the injury there was still a marked depression at the seat of the fracture, but the man was able to perform his duties as a police officer. Since this time he entirely recovered. While it is true that the brain of the child will accommodate itself to pressure, it is also true that in a great many cases the brain of the adult will, in like manner, submit to such circumstances.

DR. W. T. BRIGGS, of Nashville, said that this is one of the most vexed questions in surgery, and one of the least settled, as is proved by the length of the discussion which the paper has elicited. He would only speak of one or two points that were not touched upon in the paper, and they were with reference to the character of the injury. There are two distinct classes of fractures of the cranium. The first is a diffused fracture, as where an individual falls from a height, or has a large body

strike his head. In these cases the injury does not stop at the cranium, but involves the brain, and in these cases the trephine is not to be employed. It cannot benefit the injury to the brain. In another class of cases the fracture is not so extensive, and in those cases the trephine is called for where there is a circumscribed injury of the bone, and where it is confined to that structure. For the simple symptom of compression due to depressed bone, except in rare instances the trephine is unnecessary. Most symptoms are dependent upon disturbances of circulation or molecular changes. The symptoms of compression and of inflammation he considered very similar. Where the depressed bone is broad the symptoms will pass off, and there is no need for the trephine; but where the fragment is acuminated, we do not meet with symptoms of compression from the depression of bone. Where compression manifests itself in such cases, it is generally due to some other condition. In many of the cases it is due to an accumulation of blood, and where blood is thus poured out, there is danger that, by the continual accumulation of blood, the compression will be kept up until death occurs.

Where the compression is due to the formation of pus, we should follow the rule for such conditions in other parts of the body, namely, to evacuate the pus. But the chief, and in fact the only use of the trephine, is for the removal of points of irritation produced by depressed fragments or spicula of bone which are pressing upon the membranes and depressing the brain. We may and we may not have signs of compression in these cases. These symptoms may pass off in a short time, to be followed by other symptoms—symptoms of irritation of the brain, indicative of the commencement of inflammation. The patient then lies upon one side, with his arms and legs drawn up, and there is a twitching of the face. He is semi-comatose, but can be aroused by calling his name. Where there are symptoms of compression of the brain, it is the imperative duty of the surgeon to resort to operative procedure and to apply the trephine at the earliest possible moment. It is then only useful for preventing those changes which cannot be cured. He had for the most part made a mistake in comparing open fractures of the skull with open fractures of other bones, and the question that had been asked—Who would think of converting a simple fracture of one of the long bones into a compound fracture?—had no bearing upon the question under discussion. There is an anatomical difference between the cranial bones and the other bones, both in their structure and in their surroundings. It had been his practice to cut down upon a fracture of the skull and make a free opening, in all cases of doubt. This gave to the surgeon a feeling of relief in the consciousness that he knew the actual condition of the case.

As for the operation of trephining, there was no danger in the mere removal of a button of bone, so long as care was taken not to injure the tissues beneath. But he thought that exploratory perforations of the cranium should be done very guardedly, and he would not resort to it unless symptoms were present indicating at least the possibility of more serious damage to the internal table than to the external. With regard to the operation of ligating the vessels of the skull, he had never experienced any difficulty in arresting the hemorrhage by pressure.

DR. ROBERTS, in closing the discussion, remarked that the views that had been expressed, although critical, had tended rather to strengthen than to overthrow his faith in the propositions he had stated, the truth of which he thought would be more generally accepted five years from now than at the present time.

A distinction must be made between the term compression and pressure. The brain is a jelly-like mass, filling up an oval cavity and a long tube. It is so surrounded by fluid that compression is almost an impossibility. Pressure upon it, unless of extraordinary severity, will not compress it. It has been urged in opposition to the statement in the first proposition, that symptoms come on too rapidly to be due to compression. This is not an evidence that the brain has been compressed; neither is it an evidence that there has not been developed an inflammation. If a man runs his finger into his eye, he does not develop compression, but within a very few seconds there are symptoms of irritation and inflammation. The symptoms that are usually attributed to compression are, as a rule, due either to shock, laceration, contusion, or that obscure symptom called concussion, which he did not believe in as a functional disease. It should be called multiple or comminuted laceration. The nerves of the brain, branches for the most part of the trigeminal nerve, are usually lacerated in these cases, and may have something to do with the symptoms which so quickly develop, and which are due to rapid inflammation; and it is not at all impossible for inflammation to arise before the surgeon has arrived. If the brain were a hard ball enclosed in the skull, there would be no such thing as intravenous hemorrhage of any consequence.

He did not intend to convey the idea that open wounds were to be preferred to closed ones. On the contrary, he thought it wise to permit the wound to remain closed, if possible; but he would prefer in all cases an open wound to a closed one, with obscurity as to the damage with which he was dealing.

The statistics of Amidon had been criticised by a former speaker. Admitting that that author had been incorrect in fifty per cent. of his cases, and dividing his statistics by two, the statement of his paper was still correct, namely, that the operation of trephining is but little more dangerous than that of amputation through the metacarpal bone.

With regard to probing and drainage, he said that we owe to Dr. Fleurer more than to any man who has written lately for his remarkable success in these respects. The method of that surgeon was then described. The probe that is used for exploration of the brain should be very light and should be armed with a large olive-shaped tip, so that it cannot do injury to the brain. It should then be allowed to drop into the track of the ball by its own weight without any force from the hand of the operator. Dr. Fleurer has had a probe made of aluminium, in order to secure lightness.

Referring to the case reported by Dr. Prewitt, he said that the reason for there not being disturbances of sensation in the case in which so large an amount of brain matter was removed from the parietal region, was that the point of injury was in the posterior portion of the

parietal bone, and not in the anterior, where the centre of sensation is situated.

He then reported the case of a child in which there was a fracture of the parietal bone of so great extent that pressure over the seat of fracture caused blood and air to escape from the ear. It was a case that would have been considered one of fracture of the petrous portion. He trephined, removed the fragments, and the child recovered.

In conclusion, he called attention to the fact that he had not said that the trephine should be applied in all classes of cases but two. In two classes of conditions, he had said that the trephine should not be employed under any circumstances; in two, that it should possibly be used; in two, that it should probably be used, and in another, that it should always be used.

DR. S. W. GROSS, of Philadelphia, then read a paper on

NEPHRECTOMY: ITS INDICATIONS AND CONTRAINDICATIONS.

The information for his paper he had collected from a large number of sources; from the authorities who had written on the subject and from correspondence with a large number of eminent men at home and abroad. He was inclined to think that the operation was made more frequently than is proper, and he had endeavored to define as accurately as can now be done the cases in which it should and those in which it should not be performed. He also considered it in connection with the operations of nephrolithotomy, nephrotomy, and nephrorrhaphy.

The paper will appear in full in *The American Journal of the Medical Sciences* for July.

DR. L. MCLANE TIFFANY, of Baltimore, then read a paper on

NEPHROLITHOTOMY.

It was based upon the report of a case in which the author had successfully removed a calculus weighing 556 grains from the pelvis of the right kidney after the subject had suffered from symptoms for a period of six years. After reviewing the several steps of the operation and the methods employed, he entered into a discussion of the etiology of the affection, the symptoms and the various modes of treatment, together with a review of the statistics of operations. In discussing the symptomatology, considerable stress was laid upon the character of the pain, and the statistics of a large number of cases were reviewed with reference to this and other symptoms. This paper will appear in full in an early issue of THE MEDICAL NEWS.

DR. S. W. GROSS congratulated Dr. Tiffany upon the successful termination of his case, the more particularly because he had removed from an otherwise healthy kidney the largest calculus that has as yet been recorded, the only one approaching it being the concretion, weighing nearly one ounce, excised by Mr. Bennett May.

As Dr. Tiffany has stated, the operation is a comparatively safe one. Thus, of 21 cases that Dr. Gross had collated, 2, or 9.52 per cent., died—the patient of Cullingworth from the blocking of the opposite ureter by a stone, and that of Mr. Pepper, as he writes me, from the effects of morphia. In Mr. Thornton's 3 cases, the operation was by the combined lumbar and ventral incision, while the remainder were by the lumbar incision. In the cases of Butlin, Anderson, and Cullingworth, the stone was removed through an incision in the pelvis of the kidney.

He also agreed with the author of the paper in regarding the diagnosis of renal calculus as being far from easy. Intermittent attacks of renal colic, with tenderness on pressure, the presence of blood, and, it may be, of a little pus, in the urine, with frequency of micturition, are, in the absence of vesical and prostatic lesions, the best diagnostic signs; but they may be present in cases of highly acid urine, and in the early stage of tubercular kidney. The group of symptoms which he had just mentioned being present, the surgeon is certainly warranted, after the failure of ordinary remedies to relieve them, in cutting down upon the kidney through the loin, with the view to its exploration with the fingers, a needle, and, if needed, by an incision of the kidney substance itself, through which the finger can be carried into the calices and pelvis of the organ.

And this brought him to the third conclusion, that incision down to and exploration of the kidney are eminently proper, in which he entirely agreed with Dr. Tiffany. Thus, of 22 exploratory operations which he had collated, all recovered, and the organ was incised in 3. Should incision in every case of failure of the ordinary methods of exploration to detect a stone be the practice of the future, the risks will doubtless be added to; but he believed that Mr. Morris is right in recommending its adoption. It certainly should be resorted to before the kidney is sacrificed by extirpation.

DR. J. W. S. GOULEY, of New York, called attention to the report of a somewhat similar case that was read at the first meeting of the New York State Medical Association. In his opinion, a great deal of good was done by crushing the stone before an attempt was made at its removal, as had been done in both these cases. In the case just reported the stone was made up chiefly of the phosphate of lime. This he considered an important point, as throwing light upon the remarks that were made at the last meeting of the Association, when it was stated, in contradiction of his views, that a stone found in the prostatic portion of the urethra, and consisting chiefly of the phosphate of lime must of necessity have had its origin in the prostate. This he thought proved his former statement, that any inflamed mucous membrane would lead to the formation of such a calculus. He also considered the incision through the outer edge of the kidney preferable to the incision through the pelvis, as being less liable to result in permanent fistula. A free incision should also be made.

DR. T. A. MCGRAW, of Detroit, remarked that calculi are rare in the State of Michigan, but for that reason he could give one or two suggestions as to their pathology when they do occur. The stones are almost invariably the result of obstruction, coming chiefly from a stricture of the urethra or an injury of the prostate. While stones are rare, there are a good many cases of renal abscess in the State, and he had observed that in these cases, where the ureters remained impervious, there were found no small calculi, but where the ureter has become thickened so as to cause an obstruction to the flow of urine, calculi are apt to be met with.

DR. P. S. CONNER remarked that we are much en-

couraged in resorting to operative procedure in serious cases by the happy result that has been reported for these cases. We are encouraged to cut down upon these kidneys, knowing that if we find a stone we will relieve the kidney of its trouble, and that if we do not find a stone we will do no injury to the patient.

DR. T. F. PREWITT, of St. Louis, asked for more definite statements in regard to the comparative advisability of cutting through the kidney substance and the pelvis.

DR. TIFFANY stated that all the cases with which he was acquainted, including that reported in the volume of the New York Medical Association's Transactions, which, however, he did not think properly came under this head, where the incision was made through the substance of the kidney, had recovered. As far as his own views were concerned, he would prefer that method of operation. He thought further, that the part of the kidney that was exposed by the incision was the proper place to incise the gland, without attempting to get at the posterior part. In his operations, he had opened the abdomen by means of Langenbeck's incision and cut through the kidney at the point where it brought him upon it.

DR. GOULEY still maintained that the case to which he had called attention should be classed in the same category as the case reported by Dr. Tiffany, for if we eliminate all cases in which there is something in the pelvis of the kidney besides the calculus, there will remain no such cases as pure nephrolithiasis, and carrying the point a little further, there is no such thing as a case of pure vesical calculus.

DR. GROSS stated that there is no cause to fear hemorrhage from an incision of the kidney-structure, for the flow of blood can readily be arrested by the application of pressure with a sponge for half a minute. With regard to the point of the kidney that should be incised, he thought that we should enter at the spot which is the most accessible, whether that be the pelvis or the cortex. He further called attention to the difference between the operation for calculus and that for calculous pyonephrosis, or calculous hydronephrosis.

The Association then adjourned.

The afternoon was devoted to a visit to the Johns Hopkins University and Hospital, in Baltimore.

THURSDAY, APRIL 23D.

MORNING SESSION.

DR. J. COLLINS WARREN, of Boston, presented a communication on

THE HEALING OF ARTERIES AFTER LIGATURE.

He apologized for the presentation of a paper upon a subject that had been discussed by the Association so recently as last year, by the statement that it was a subject to which he had for several years given especial attention.

After reviewing briefly the history of the subject, and referring to the investigations that have been made by numerous authorities, ancient and modern, he remarked that the investigators who have interested themselves in the process of repair in arteries, have considered the question usually from some special standpoint, such as "the organization of the thrombus," "the part played by the white corpuscles," "the endothelium," etc. The object of this paper was, however, to study the various pathological changes which occur in and around the vessel during the entire process of cicatrization. These changes may be compared not inaptly to those which occur in the repair of fractures of long bones. In both we find an external and an internal callus, the former having only a provisional existence in the case of arteries, the latter undergoing certain changes through which the lumen of the vessel is, though imperfectly, reëstablished by the so-called "canalization" of the thrombus. In the meantime, the walls of the vessel are undergoing changes which enable them to participate in the final process of repair.

Where a large artery is tied in its continuity, the intima and a portion of the media are usually ruptured, and the adventitia is gathered into a dense pseudo-tendinous sheath around the constricted ends. The first noticeable change is the formation of the thrombi, and the development of a granulation-like mass of cells about the ligature, which, if it has been cut short, is completely enveloped by it. This is a true connective-tissue growth, and covers the end of the vessel just as the granulations cover the surface of a wound. We find further, that this tissue extends some distance up and down the sides of the divided vessel in the peri-adventitial tissue, the round cells of which it is composed invading only the superficial layers of the adventitia. At first, the cells do not penetrate at the point of ligature where the fibres are densely packed, but they follow the ligature as it cuts through, and appears to exert a solvent action on the resisting fibres of the adventitia. In case a double ligature has been placed upon a vessel, the granulation cells enter the isolated central portion at the retracted ends, and not directly through the walls, as some investigators have supposed, and gradually disintegrate the various coats, invading them eventually from every point. The process is, however, a slow one.

Advanced changes are seen in the proximal thrombus as early as the fourth day. By the fifteenth day, the new tissue has become very abundant, and has the appearance of granulations growing into and replacing the thrombus. By the end of a month only fragments of the thrombus remain, and the granulations presented themselves to the lumen of the vessel. The walls of the vessel are, during this time, undergoing certain changes. The cells of the intima unquestionably proliferate. This proliferation can be studied in specimens in which the distal thrombus is small, and in the space between two ligatures; the amount of this tissue developed is, however, sufficient to supply but a small part of the internal callus. The part taken by the endothelium appears to be one which furnishes a new endothelial covering to the cicatricial tissue, and a lining to the new vessels that have been formed. At an early stage of the process, cells are seen springing from the muscular layers and projecting into the thrombus. Later, elongated spindle-cells with stellate nuclei become apparent. These are sometimes single, sometimes in bundles, and were, he believed, a new growth of muscular tissue. At the point of ligature, the elastic lamina appears frayed out, and is seen extending in various directions through the new tissue; the media begins by the end of the second week to retract, as does

also the adventitia, leaving a space through which vessels eventually find their way, and communicate with those coming down from the lumen. At the end of three months, the cicatricial process is complete and only a cicatrix remains.

He called attention to the remarkable infrequence of aneurismal dilatations after ligation, and gave in explanation thereof this development of a tissue so closely resembling the three layers of the vessel wall, and having all the powers of resistance which they possess. In the larger vessels of the human subject, where there is less muscular and more elastic tissue, the new muscular tissue is not so apparent, but the connective tissue is greatly increased in quantity and extends for a long distance into the lumen of the vessel. In the specimen of the ligatured carotid artery of a horse, this amounted to about four inches.

DR. N. SENN, of Milwaukee, expressed gratification at the beautiful specimens presented by Dr. Warren, as well as for the demonstration which he had given, but especially for the view he had expressed regarding the part taken by the muscular fibres in the formation of the cicatrix. He took exception, however, to the manner in which the experiments had been made, because traumatisms of the vessel walls had occurred in almost every instance, and because antiseptic precautions had not been carefully employed. All that is necessary for the definitive closure of a vessel is simply to approximate the surfaces of the intima without causing rupture of any of the tunics. In the first illustration exhibited by the author, both intima and media had been ruptured. It was, in his opinion, on account of this rupture that embryonic corpuscles were found in the vessel. Such rupture, he further thought, was not only unnecessary, but positively harmful. The behavior of the tunics depends upon the character and material of the ligature used, and upon the intensity of the inflammation which results after the application of the ligature. The amount of callus that is produced corresponds closely to the amount of inflammation that is developed. In his own experiments he had observed that in cases where his antiseptic precautions failed, an enormous amount of callus was developed; and although he had not, in any of his experiments, met with secondary hemorrhage, the fact is patent that such an accident may take place at any time, regardless of the amount of callus, provided suppuration has occurred.

When the ligation is performed with the "temporary ligature" (catgut), it is unnecessary to cause division or absorption of any of the tunics of the vessel. After contact of the vessel walls for a period of from seven to twenty days, union occurs and the callus is removed without the division of the tunics. Such, however, is not the case when a permanent ligature is applied. The ideal ligature is one which, being applied, keeps the parts in contact until the definitive closure of the vessel has occurred, and which is then capable of being absorbed. He expressed pleasure at the comparison made between the conduct of a vessel after ligature and that of a bone after fracture. He would, however, carry it a little further and remark that the proper treatment of a fracture of bone is to hold the fragments in contact in such a manner as to insure as small an amount of callus as possible. Callus is only necessary for the purpose of establishing the continuity of bone. In a fracture in which the fragments are not in apposition, or for some reason are not kept in apposition, there is always an abundance of callus. We should endeavor also after ligature to obtain a minimum amount of callus, for if we succeed in obtaining primary union, there is no need of the callus.

The idea of the development of a muscular cicatrix is a new one, which, he hoped, future observation would prove correct; although it was evidently contrary to analogy. We all know that repair of muscle after rupture or division takes place not by the growth of new muscular fibres, but by a cicatricial formation developing from the connective tissue substance lying between the muscular fibres. He had further observed that after muscles were wounded, the fibres invariably underwent fatty degeneration. Finally, he considered the rarity of the occurrence of aneurism after ligature, due to the development of so large an amount of connective tissue, rather than to any growth of new muscular tissue.

DR. MOSES GUNN, of Chicago, in referring to what had been said about ligating vessels without rupturing their coats, said that he had for several years carried in his mind a plan by which he thought that, if called upon, he could so apply a ligature to the innominate artery as to secure its closure. The contribution of Dr. Senn, a year ago, had, however, caused him to alter his method. If it is not necessary to wound the tunics of the vessel, he thought that if he were called upon to ligate that vessel he would do so by the method of double ligature referred to by Dr. Senn. Passing one ligature around the innominate and securing it, he would place a second ligature upon the subclavian and a third upon the carotid, and after having forced all the blood out of the intervening portion of the vessel, draw them down with sufficient firmness to approximate the walls of the vessel. With regard to Dr. Warren's theory of the action of the muscular fibres he could express no opinion, but he felt sure that, whatever the method adopted, it is of the utmost importance to secure union as rapidly as possible in order to have the whole strength of the vessel to aid in resisting the pressure of the blood.

DR. WARREN agreed with Dr. Senn with regard to his statement that the amount of inflammatory action corresponded in these cases to the extent of the traumatism. He had sometimes found it difficult to discover external callus, but even in cases where the strictest antiseptic precautions had been employed, as in the experiments of Mr. Lister himself, there was observed "a ring of new tissue" which was in reality the external callus. He further stated that when he at first began his experiments, he had been inclined to adopt the theory of Dr. Senn, namely, that there was no necessity for a trauma, but that he had later concluded that the view was incorrect. He had observed what he had believed a primary union between the internal coats of the vessel, but upon closer observation of the process about the beginning of the second week, he discovered that a slow process of absorption was taking place within the substance of the vessel-wall, and that this absorption was followed later by a growth of granulation tissue. He expressed full aquiescence in the theory of Rindfleisch, that so long as the intima of a bloodvessel remains intact the blood will not coagulate no matter how slow the current be, or even if the blood come to a

stand; but when once this coat is injured in the slightest degree, coagulation rapidly ensues, and a thrombus is produced.

With reference to his theory of the new growth of muscular fibres, he asked attention to the fact that there is a decided difference between the behavior of striped and unstriped muscular fibres, and that while a new development of striped muscular fibres would be an anomaly, such was not the case with the unstriped variety. Whenever we have repair of any kind going on in the body, we have new bloodvessels with muscular walls developed; new muscular fibres develop in the gravid uterus, as well as in every variety of myomatous tumor.

DR. T. F. PREWITT remarked that Dr. Senn, in his paper of last year, ascribed no importance to the clot which forms within the ligated vessel, and that Dr. Warren had expressed himself as favoring as slight a formation of clot as was possible. He, therefore, asked what value, if any, was to be placed upon it.

DR. WARREN replied that so far as the histological process is concerned, the clot was of no importance at all, but that he considered it of great value in the prevention of secondary hemorrhage. In small vessels, its value is small in ratio, but in large vessels, where the pressure is great, its value is great. It is the first stage of a protective callus.

DR. E. M. MOORE, of Rochester, inquired whether Mr. Lister had not been quoted in the Association as saying that a catgut ligature might become organized. An affirmative reply being received, he stated that when Mr. Lister's attention was called to the report of his having made the statement (as published in the Society reports), he pronounced it an error, and ridiculed the idea of a catgut ligature being converted into humanity.

DR. J. W. S. GOULEY, of New York, next read a paper entitled

SOME POINTS IN THE SURGERY OF THE HYPERTROPHIED PROSTATE.

Since the time of Sir Everard Home, our knowledge of the pathology and surgery of the prostate gland has come from the single source of M. Mercier, of Paris. His writings require careful study. Little has been added to the principles which he has inculcated, and many of his procedures are new. He has stated that fifty per cent. of all men above the age of fifty years are afflicted with more or less hypertrophy of the prostate, although only seven per cent. of these suffer any marked signs of the disease. The points to which he desired to direct particular attention with reference to this condition were the physical exploration, and the medicinal and surgical treatment of it.

Physical exploration. Digital examination per rectum will give some idea of the size and consistency of the prostate; whether one lobe is larger than the other; if it is nodulated or smooth; and whether it is of normal length or there is longitudinal increase. Very frequently a considerable enlargement of this gland will escape observation if the examination is confined to this method. Other methods of examination are, therefore, required before a diagnosis is arrived at. The next step in the examination of a case is to ask the patient to urinate in the standing posture. If he is able to urinate spontaneously, some idea of the condition of the prostate may be arrived at from the character of the stream. But it is always to be remembered that a man with a constricted urethra voids his urine in precisely the same manner as a man with an enlarged prostate. The stream flows steadily for a time, then stops, a few drops escape, the stream again flows, then a few drops, then a dribble, and so on. After the individual has discharged all the urine he is able to void spontaneously, a soft catheter is introduced, and the residual urine drawn off, measured, and examined chemically and microscopically. It may be clear, but is generally cloudy. The physical examination is further carried out by the use of certain rectangular sounds of a peculiar size and shape. Most of these instruments are of no value. To Dr. Mercier belongs the credit of having invented a small rectangular sound, which is of the greatest value. Its chief advantages are in the extreme shortness of its beak, being only seven-eighths of an inch in length. He then described minutely the method of using these sounds. Not only the size, but the exact form of the enlargement of this gland could in many instances be outlined, but for this purpose he had devised an instrument having two bars and possessing many superior qualities, all of which were detailed. Some further remarks were made as to the various conditions that were likely to be found in hypertrophy of the prostate.

He then passed to the consideration of the medicinal treatment. Although the idea of reducing the hypertrophied gland by purely medicinal means had been exploded long ago, it was constantly being revived in the hope that an infallible remedy had been discovered. Among the fashionable remedies at the present time, are mineral waters, and while he did not wish to condemn their use, he regretted that they too often led to the neglect of other more valuable methods. Remedies can also often be employed for the relief of concomitant symptoms and to the improvement of the general health of the individual.

The consideration of the surgical treatment was subdivided into two distinct parts: first, mechanical means of relief; and, second, the removal of the organ by surgical means. All hard catheters should be discarded except in cases of false routes. The method of using several curved, hard, and soft catheters, including the elbowed and the double-elbowed instruments of Mercier, were described. Among other requirements for a soft catheter was that it should have as small and as smooth an eye as possible, and never two eyes. Small catheters are usually preferred, but too small an instrument should never be used. Where false routes exist, a large catheter should be employed, and where this fails, the invaginated catheter of Mercier is usually successful, but it requires to be used with the greatest care and caution, for unless the surgeon keeps the male portion of the instrument under perfect control, it may do injury.

Evacuatory catheterization should be commenced early in the history of each case, but in old cases, where the bladder has become distended, it is of the greatest importance that all the urine be not removed at one time. The catheter should be used as often as from twice to five or six times daily. If the catheter be too freely used, many of the alarming symptoms are

relieved and the individual appears to be in a much better condition than before, but at the expiration of a few days the individual begins to show symptoms of disease of the kidneys, which rapidly increasing in severity, lead to his death at the expiration of a month or six weeks.

In some of these cases there is great difficulty to determine the proper course of treatment. Without the use of the catheter the individual must succumb; it use is unsafe. Under such circumstances, he advised the withdrawal of but a small part of the residual urine at intervals of once in several days, until tolerance was established. In one case that had come under his observation, the enlarged bladder, extending above the umbilicus, was mistaken for a hydatid cyst and tapped. After its true nature was discovered, the method of small and infrequent catheterization was adopted, with the effect of producing a toleration. Polyuria is, however, very apt to develop and carry off the patient, as the author had seen in several instances.

Another method upon which he laid great stress was the injection of medicated fluids into the bladder in a quantity to correspond to the amount of urine removed. For this means a solution of borax was most employed, but various other agents might be used, as when the urine was strongly alkaline, an acid might be added; when large accumulations of mucus and pus were present alkalies were indicated; and when phosphates were deposited in the cavity of the bladder, he recommended the use of weak solutions of acetate of potash. The use of carbolic acid he did not endorse, but considered the nitrate of silver, in properly diluted solutions, one of the most valuable agents we possess. Morphia, hyoscyamus, or cocaine, may be added in cases of great vesical irritability. Finally, hot and cold water have had their advocates.

Removal of the gland. This operation was first performed by means of incisions by John Hunter. Caustics have been employed; Dr. Physick, of Philadelphia, dilated the neck of the bladder; others have made compression with a metallic sound. Attempts have been made to ligate the tumor and some have tried to grasp it and tear it away with Jackson's lithotrite. Mercier devised an instrument for the removal of the prostate as early as 1838, and since then he has made three modifications, one for incising, and two for excising the tumor. As the inventor had not given any special name to either of these instruments, the author had taken the liberty of calling them respectively, prostatitome and prostatectatome; naming the operations prostatotomy and prostatectomy.

DR. S. W. GROSS, of Philadelphia, considered the remarks which had been made especially proper in their application to the treatment of patients after they have entered upon their "catheter life." He also endorsed the remarks upon the propriety of prostatotomy.

There can be no doubt, he continued, that the operative treatment of enlargement of the median portion of the prostate, giving rise to obstruction of the vesical orifice of the urethra, is capable of great advances. Up to the present date he regarded prostatotomy, as practised by Mr. Reginald Harrison, as fulfilling the indication more surely and with less risk to the patient, than any operation that has been devised. In the case of an old man, that surgeon opened the membranous urethra through the perineum. The obstruction was then divided, partly with a probe-pointed knife and partly by divulsion with the finger, and the edges kept apart for eight weeks by means of a large tube, through which a smaller tube was passed to conduct off the urine. The patient was able to go about in ten days. On the withdrawal of the tube, a large bougie was passed regularly until the perineal wound closed. The results of this operation were that all obstacle to normal micturition was overcome, the urine was passed every few hours, and the bladder was completely emptied. At the end of six months the patient had a paralytic seizure, but there was no necessity for a resort to the catheter.

The case was a most unfavorable one for operation, but the result was most brilliant. Through the small perineal wound the nature of the obstruction was accurately determined, and the incision was made with a degree of accuracy and safety which cannot be attained with Mercier's cutting instrument passed through the urethra.

In the *Gazzetta degli Ospitali*, for February 11, 1885, he found that Professor Bottini, of Pavia, has successfully operated on a similar case with the thermo-cautery applied to the median portion for forty-five seconds. A catheter was retained in the bladder for four days, when it was removed, and the bladder emptied every six hours. The first natural emission of urine took place on the twenty-fourth day. At the expiration of three months, micturition was normal, and the urine was clear and acid. At the end of three months and a half more, the patient was fully restored to robust health. As in the operation of Mercier, there is no certainty in operation through the urethra with the thermo-cautery; and when we consider the great tendency of cicatricial tissue after burns to undergo undue contraction, it is a matter of grave doubt whether the improvement will be permanent. Hence, he believed that the operation of Harrison is the better one, and one that is entitled to extended trial.

DR. E. M. MOORE agreed with Dr. Gouley that the greatest element of danger in the cases is the complete evacuation of the bladder. He thought the introduction of injections of borax, boric acid, etc., a measure that would prove of much service. He further stated that a case incorporated in the paper just read, in which, as an effect of a rapidly developed polyuria, twenty-seven pints of urine were withdrawn from a bladder in twenty-seven consecutive hours, was a case treated by himself. He stated further that he had obtained beneficial results from moral treatment, teaching the patient to overcome the desire to micturate until he could retain his urine for four hours at a time. Where the catheter could be tolerated, he preferred to use it only after the individual had evacuated as much urine as possible spontaneously; then introduce the instrument and withdraw the residual urine.

DR. GUNN remarked that he had employed the method of moral treatment with benefit for at least five years.

DR. GOULEY, in closing the discussion, claimed priority for the operation of excision of the prostate, and stated that, in some instances, due credit had not been given him, although Dr. Mercier had put it on record as his operation.

AFTERNOON SESSION.

DR. HAROLD C. ERNST, of Boston, made some remarks on

CULTURE EXPERIMENTS ON THE GROWTH OF THE MICROÖRGANISMS OF DISEASE.

Most of the work in this field, he stated, has been done by Rosenbach, who has demonstrated that there are several forms of microörganisms which are invisible with the use of the older methods of staining. The discovery by Koch of the method of culture by dry culture-media has enabled Rosenbach and others to cultivate and render visible many of these otherwise invisible forms. As a specimen of work which he himself had done, he exhibited cultivations from a perinephritic abscess in which two forms of micrococci were observed, one white, the other yellow (arias and albus); one of erysipelas ten days old; and one from a tumor of the leg. In the latter specimen he had found a micrococcus which differed from any that he had seen described, in that the cultivation was of a different color. To it he had given the name sepiacoccus, but did not hold to the correctness of the term, inasmuch as the color was not a pure sepia. In his cultivations, the pus from whatever source was transferred to a sterilized fluid with all the precautions possible. The culture-media which he had found best suited to all purposes was the fleisch-peptone agar-agar of the Germans. The methods of culture upon this and other media were then briefly described. He closed his remarks with a description of the difference between the comma-bacillus of cholera, as described by Koch, and that of cholera-morbus, chiefly in its behavior upon the gelatine culture-fluid, the former liquefying the gelatine to a greater depth in the same length of time than the latter.

In conclusion, he invited the members to examine some microscopic preparations of various germs in an adjoining room.

DR. WARREN remarked that the methods of Rosenbach promised us an easy and sure method of diagnosis in many obscure surgical cases. He further narrated several cases in which culture tests in the hands of Dr. Ernst had been of considerable value to him. In one instance to which Dr. Ernst had made casual reference, a tumor of the knee was incised, a small portion of the fluid or juice removed, and a cultivation of it made. The colony resulting was of a peculiar citron color, not described in the book of Rosenbach. The tumor was removed, and microscopic examination of it revealed the fact that it was an epithelioma. He did not, however, go so far as to claim that he had found the germ of that disease. He stated that he has been in the habit of late of using sterilized cotton as a dressing of all wounds, and considered it better than ordinary applications. A temperature of 150° C. had been found sufficient to sterilize several pounds of cotton in an hour.

DR. ERNST stated that he had not intended to claim any originality for his studies, but merely to show that when carried out according to the directions given by Rosenbach, the result of such investigations proved as described in the work of that author.

DR. N. SENN, of Milwaukee, then read a paper entitled

AN EXPERIMENTAL AND CLINICAL STUDY OF AIR EMBOLISM.

As indicated by the title, it was based both upon a thorough review of the literature of the subject and a large number of original experiments. In some instances as many as forty experiments were reported in proof or disproof of a single statement. The treatise was divided into eleven chapters, from each of which were drawn a number of practical suggestions. The titles of these respective chapters were:

I. Introduction, in which the subject is considered in a general manner as regards its application to surgery, and to some extent the causes and manner of its production. The term air embolism was defined, "The pressure of free atmosphere within the vascular system during life and in sufficient quantity to give rise to symptoms of obstruction."

II. The history of air embolism.

III. The intravenous production of air. With regard to this phenomenon, he expressed the belief that it is of very rare occurrence, and that inasmuch as nearly all cases in which air has been found in the vessels post-mortem, were cases in which death had occurred as a result of hemorrhage, the air had been aspired into the open mouths of the bleeding vessels. In cases in which no wound on vessels can be found, however, he thought it possible that the bubbles were a gaseous substance produced from decomposition of the blood, although it had not been found in sufficient quantity for the determination of its chemical constituents.

IV. Effect of the heart and respiration on the venous circulation.

V. Aspiration of air into the superior longitudinal sinus. This was considered chiefly with regard to its importance as a complication of operative procedures about the head. The author also considered the views of various writers in regard to its production. A number of experiments were reported, and from them a list of practical suggestions was adduced.

VI. The immediate cause of death after intravenous insufflation of air.

VII. Intra-arterial insufflation of air.

VIII. The clinical study of air embolism. In this section was considered the various symptoms that result from the entrance of air into the principal vessels of the body, together with the comparative fatality of each.

IX. Experiments on venous air embolism. These experiments were made for the most part upon dogs, and demonstrated, in the opinion of the author, not only the innocence of the operation of aspirating the heart, but that it is absolutely indicated as a therapeutic method in cases of the introduction of air.

X. Prophylactic treatment of air embolism. The chief of these methods are position, compression, ligature, and the aseptic tampon.

XI. The operative treatment of air embolism.

In conclusion, he submitted the following résumé:

1. The presence of adventitious air in the vascular system during life gives rise to air embolism.

2. Each air embolus constitutes a mechanical source of partial or complete obstruction to the flow of blood in the vessel in which it is located.

3. Aspiration during the inspiratory movements of the chest is the direct or exciting cause of ingress of air into a wounded vein or sinus.

4. Elevation of the head is the sole predisposing cause of the entrance of air in wounds of the superior longitudinal sinus.

5. In veins, the predisposing causes consist in

(*a*) Elevation of the part wounded; (*b*) Pathological or anatomical conditions which prevent collapse of the vein when it is wounded.

6. Insufflation of a fatal quantity of air into a vein produces death by:

(*a*) Mechanical over-distention of the right ventricle of the heart, and paralysis in the diastole; (*b*) Asphyxia from obstruction to the pulmonary circulation consequent upon embolism of the pulmonary artery.

7. Insufflation of the same quantity of air into arteries is less dangerous than when introduced into veins. When death is produced in this manner it results from:

(*a*) Acute cerebral ischæmia; (*b*) Secondary venous air embolism; (*c*) Intense collateral engorgement of the vessels of the brain and spinal cord, the manner of death being determined by the amount of air injected, and the direction in which the injection is thrown, as well as the time which has elapsed between the operation and the fatal termination.

8. Air injected into arteries is readily forced through the systemic capillaries into the venous circulation and right side of the heart by the powerful contraction of the left ventricle.

9. Air embolism of the pulmonary artery is relieved in a comparatively short time, provided the contractions of the right ventricle continue unimpaired for a sufficient length of time to force the air through the pulmonary capillaries into the general circulation.

10. The prophylactic treatment consists in proximal or double compression, or ligation, of the vein which is endangered by the operation.

11. The indirect treatment has for its objects:

(*a*) The prevention of the admission of air; (*b*) The administration by inhalation or hypodermatic injection of cardiac stimulants; (*c*) Venesection.

12. The direct or operative treatment by:

(*a*) Puncture and aspiration of the right ventricle; (*b*) Catheterization and aspiration of the right auricle, which is proposed with a view to obviate the direct cause of death by the removal of air and spumous blood, thus relieving directly the over-distention of the right ventricle, and, at the same time, to guard against a fatal embolism of the pulmonary artery.

13. The results obtained by experiments upon animals warrant the adoption of the operative treatment of air embolism in practice, as a last resort, in all cases where the indirect treatment has proved inadequate to meet the urgent indications.

In Executive Session the following surgeons were

ELECTED TO FELLOWSHIP:

J. Edwin Michael, A.M., M.D, Professor of Anatomy and Clininal Surgery in the University of Maryland; Roswell Park, M.D., Professor of Surgery in the University of Buffalo; W. H. Carmalt. M.D., Professor of Surgery, Medical Department Yale College, and Surgeon to New Haven Hospital; J. Ford Thompson, M.D., Professor of Surgery, Columbia Medical College, Washington; Theodore R. Varick, M.D., of Jersey City.

HONORARY FELLOWS:

Sir James Paget, Bart., Mr. John Eric Erichsen, Sir Joseph Lister, of London; Thomas Annandale, Regius Professor of Clinical Surgery in the University of Edinburgh; Prof. Esmarch, of Kiel; Prof. Von Langenbeck, of Berlin; Prof. Volkmann, of Halle; Prof. Czerny, of Heidelberg; Prof. Billroth, of Vienna; Prof. Nussbaum, of Munich; Prof. Verneuil, of Paris; Prof. Ollier, of Lyons.

The following were elected

OFFICERS FOR THE ENSUING YEAR:

President.—Dr. Moses Gunn, of Chicago.

Vice-Presidents.—Drs. Christopher Johnston, of Baltimore; Thomas P. Russel, of Oshkosh, Wisconsin.

Secretary.—Dr. J. R. Weist, of Richmond, Indiana.

Recorder.—Dr. J. Ewing Mears, of Philadelphia.

Treasurer.—Dr. John H. Brinton, of Philadelphia.

Member of Council.—Dr. L. McLane Tiffany, of Baltimore.

Chairman Committee of Arrangements.—Dr. J. S. Billings, of Washington.

Time and place of next meeting, Washington, D.C., on the Wednesday preceding the meeting of the American Medical Association.

MISCELLANEOUS BUSINESS.

The following resolution offered by the Council was adopted:

That names of candidates for admission must be accompanied by a statement of official positions held, writings, and the claims upon which the application is based.

Resolved, That at future meetings of the Association one hour be the limit of time allotted for the reading of a paper.

(To be concluded.)

MEDICAL ASSOCIATION OF GEORGIA.

Thirty-sixth Annual Meeting, held at Savannah, April 15, 16, and 17, 1885.

(Specially reported for THE MEDICAL NEWS.)

THE Thirty-sixth Annual Session of the Medical Association of Georgia was held in Savannah, April 15th, 16th, and 17th.

The Association was called to order on the morning of the 15th, at 11 o'clock, by the retiring President, Dr. A. W. Calhoun, of Atlanta.

Addresses of welcome were made by Dr. W. H. Elliott, of Savannah, and Hon. R. E. Leston, Mayor of Savannah. These were reponded to by Dr. T. W. Holmes, of Rome, on behalf of the Association.

The retiring President then introduced the President-elect, DR. EUGENE FOSTER, of Augusta, who delivered

THE ANNUAL ADDRESS,

the subject of which was

THE EXTENT, CAUSES, AND PREVENTION OF PREMATURE DEATH.

The speaker claimed that the inherent potential longevity of man was from eighty to one hundred

years, and that every human being had an inborn right to this period of life.

In seeking causes of premature death, he cited the fact of the 1146 diseases—general, local, etc.—which affect mankind, 27 caused fully 75 per cent. of the total mortality in 1870, and he contended that every one of these diseases is wholly preventable by application of definite and well-known hygienic measures.

He contended that there are mainly four essentials to procurement of health and longevity: 1. purity of atmosphere and water. 2. Wholesome food in quantity and quality. 3. The inheritance of a healthful constitution. 4. Freedom from contagious and infectious diseases. Man, in his individual efforts, has but little power over either of these essentials of life, with the exception of food. The only power which can secure the other three to the individual is the State. Minute and elaborate presentations of the filthiness of all cities, and the need of thorough sewerage and drainage, were made, and contained food for reflection.

The importance of, and the right to inheritance of a healthful constitution, were fully presented, and the growing evil of marriage among persons diseased with consumption, scrofula, syphilis, epilepsy, chorea, insanity, and alcoholism, was severly condemned.

Upon questions of freedom from contagious and infectious diseases, the speaker pointed out the enormous mortality from these diseases, and criticised man's stupidity in permitting cases of contagious and infectious diseases to scatter abroad the seeds of their infection when he is all-powerful to prevent the evil. He cited the fact that five preventable diseases—*i. e.*, smallpox, measles, scarlet fever, whooping-cough, diphtheria—kill 50,000 Americans every year, and yet the authorities, National and State, are indifferent to these causes of death, and are only fearful of cholera and yellow fever. He showed that the mortality from these latter two diseases was insignificant in comparison to that from other preventable diseases over which man has absolute control, and yet does nothing to prevent. He urged education of the public in sanitation as the remedy which it was the duty of the profession to promote.

THE COMMITTEES ON EXPERT TESTIMONY, AND ANATOMICAL MATERIAL

reported that bills had been presented to the Legislature, and that the legislative committees to whom they were referred reported favorably upon them, and they had every reason to believe that the bills as prepared would become laws at the approaching session of the Legislature.

These bills, as proposed, provide for proper compensation for expert witnesses, and material for dissecting purposes. Both bills have been very carefully drawn, and cover the grounds well.

DR. HOWARD J. WILLIAMS, of Macon, delivered an excellent address on

THE IMPORTANCE OF GOOD NURSING, AND THE TRAINING OF NURSES.

He advocated the establishment of schools for nurses in every city, supported by local medical boards, giving instructions in hygienic and the simpler forms of practice. He regarded women, by their nature, especially adapted to this work.

The Association abolished the present form of

PUBLICATION OF THEIR TRANSACTIONS,

and will hereafter publish them in journal form, selecting the *Atlanta Medical and Surgical Journal* as the journal of the Association.

A large number of voluntary papers were read. Among the number we present the titles of a few of the most interesting: *The best Nutriment for the Bony System*, by Dr. R. J. Nunn, of Savannah; *A New System of Treating Diphtheria*, by Dr. R. J. Nunn; *Glaucoma following the Excessive Use of Atropin*, by Dr. J. M. Hull, of Augusta; *A Case of Double Uterus, with Fœtus in Each*, by Dr. E. W. Lane.

DR. A. W. CALHOUN, of Atlanta, read a paper on

TRACHOMATOUS GROWTHS IN THE LARXNX IN CHILDREN,

removed under the influence of a twelve per cent. solution of hydrochlorate of cocaine. He stated that these growths are extremely rare, and that until the use of cocaine was suggested it was very difficult to remove them, but under the influence of a twelve per cent. solution he had little trouble in removing them.

The following were elected

OFFICERS FOR THE ENSUING YEAR:

President.—R. J. Nunn, M.D., of Savannah.

Vice-Presidents.—L. B. Alexander, M.D., of Forsyth, and T. F. Walker, M.D., of Cochran.

Secretary.—James D. Cray. M.D., of Atlanta.

Treasurer.—E. C. Goodrich, M.D., of Augusta.

Orator.—C. W. Hickman, M.D., of Augusta.

Augusta was selected as the next *place of meeting.*

LOUISIANA STATE MEDICAL SOCIETY.

Annual Meeting, held at New Orleans, April 21, 22, 23, 1885.

(Specially reported for THE MEDICAL NEWS.)

APRIL 21ST.—FIRST DAY.

MORNING SESSION.

THE Society was called to order at 12.20 P.M., by the PRESIDENT, DR. R. H. DAY, M.D., of Baton Rouge, and about seventy-five members answered to their names.

DR. G. A. LAWRASON, as President of the Orleans Parish Medical Society and in behalf of that Society, tendered the Society a cordial welcome to the city and wished the members a profitable and successful session.

DR. S. E. CHAILLÉ as Chairman of

THE COMMITTEE ON STATE MEDICINE,

presented his report. Nothing of great moment had been done by his Committee since the last meeting. The coming Legislature was composed of the same members as the last, and the Society's advocate and friend therein had expressed it as his opinion that any further endeavors before that particular body of men would be entirely useless.

At the meeting in Baton Rouge last May, some ten propositions had been presented to the Society. Of these five had been laid before the Legislature for action, viz.: 1st. A proposition for the establishment of a veritable State Board of Health. 2d. One protecting confidential communications to physicians. 3d. One

providing for compensation for expert testimony. 4th. One requiring hygiene and physiology to be taught in the public schools. 5th. An act amending the act regulating the practice of medicine. Of these five only one was passed. No. 1 was withdrawn as premature. No. 2 was passed, but the Governor failed to sign it. No. 4 was defeated by the negroes and members for Orleans. No. 5 was defeated.

Notwithstanding this bad showing Dr. Chaillé moved: That the Society re-endorse the report of 1884 of the Committee on State Medicine, and recommend the adoption of its proposition by the Legislature. Adopted.

THE RECORDING SECRETARY'S REPORT.

DR. P. B. MCCUTCHEON reported that 400 copies of the Transactions for 1884 had been distributed to various organizations and individuals, and that 125 were still on hand. He had received quite a number of valuable reports and monographs as additions to the Library of the Society.

EVENING SESSION.

DR. R. H. DAY delivered the

PRESIDENT'S ADDRESS.

Its title was *The Mission and Methods of Medicine.* He referred to medicine as an art whose date of origin was lost in mystery, though perhaps coeval with the needs of mankind for its offices. However crude the practice of medicine by primeval man, it is undoubtedly a fact that they were strict observers of the main laws of hygiene—a practice which contributed to antediluvian longevity. A man to be a physician must be prepared to spend his life in earnest endeavor and striving after the hidden secrets of nature. It is the uneducated, unscientific, as well as irregular physician who brings discredit on medicine and lessens the influence of the profession upon legislation which would be calculated to be of benefit to humanity.

At the conclusion of this address, Mr. W. H. Goodale delivered the annual oration upon *The Blameless Physician.*

APRIL 22D.—SECOND DAY.

MORNING SESSION.

THE TREASURER'S REPORT

showed the Society to be on a very good financial basis. Receipts, $773.75; disbursements, $240.70; balance on hand, $533.05, which will be materially increased by receipts at this meeting.

DR. I. J. NEWTON read a paper on

HEMORRHAGIC MALARIAL FEVER,

which contained a fairly complete résumé of what had been written on the subject.

DR. JOS. JONES spoke of a parasite having been found in cases of hemorrhagic malarial fever and the likelihood that it bore some relation as that of cause and effect. It is well known that rice is a great habitat of fungi and it may be that the special cause of this form of malaria may yet be determined. In this connection he stated it as his opinion that the cultivation of this cereal will yet work a great injury to Louisiana by its effects upon the health of its inhabitants.

DR. NEWTON asked if the cases presumably caused by this parasite were new in type.

DR. JONES thought they were.

DR. PUGH asked if it was proper to give quinine in hæmaturia.

DR. LYONS believed that the idea that quinine is a sheet-anchor in this disorder is a mistake. The complications resulting from large doses of quinine, such as profound prostration and nausea, were elements of great danger. Some physicians have abandoned its use entirely. Though he had never treated a case without some quinine, yet if called upon to choose between heroic doses and the total non-use of the drug he would choose the latter.

DR. LANGWORTHY thought small doses did good, but he placed much faith in acetate of potassium.

DR. NEWTON thought quinine useful until structural changes had occurred. It should then be discontinued.

DR. DAY stated that several cases in his Parish treated with large doses had died. He related a case of malarial hæmaturia in which there was no fever, but rather a subnormal temperature. He had used diuretics such as nitre and copaiba, and after the attack small doses of quinine.

THE REPORT OF THE CORRESPONDING SECRETARY

showed a total of 1043 physicians in Louisiana. Of these, 764 were regular, 219 irregular, and 60 were unknown.

On motion, a committee of five, consisting of Drs. Allen, Lyon, Dupre, Chaillé, and Langworthy, was appointed to consider the recommendations contained in the President's Annual Address.

EVENING SESSION.

DR. L. L. HOLCOMB presented a paper on *The Neutral or Alkaline Saturation Plan of Treatment in Malarial Irritation and Idiopathic Fevers;* and Dr. Ashton, of Shreveport, one on *A Rational Common-sense View of Therapeutics.*

A. G. FRIEDRICHS, M.D., D.D.S., of New Orleans, read an instructive paper on

THE RELATIONSHIP OF THE TEETH TO THE GENERAL SYSTEM.

The importance of the teeth in their influence upon the general system, he urged, is too often overlooked. Physicians are apt to overlook the fact that they have nerves and accompanying ganglia; that they are in close relation to the antra, and through them to the nerve fossæ, the tonsils and Eustachian tubes, and the external and internal ear, the orbit, and spheno-maxillary fossæ. Through the trigeminal nerve how easily may neuralgia be caused by reflex action from a diseased tooth. A gentleman came to his office with an acute neuralgic pain extending from one orbit to the other. No form of treatment of a month's duration had done any good. A semi-decayed dead posterior superior bicuspid, with no connection between the cavity of decay and the pulp cavity, was found. Communication was made, and instant relief followed. Another patient having neuralgic eye trouble, with conjunctivitis, intolerance of light, and lachrymation, had a tooth for its cause. Dr. Tendian relates a case of insanity from a diseased tooth. Epilepsy, paralysis, general or partial, have frequently followed from bad teeth. Dental abscesses have simulated scrofula, and

caused caries and pyæmia. He pointed out that it is important to remove thoroughly the concretions which are deposited upon the teeth in febrile affections, else decay rapidly ensues.

(To be concluded.)

NEW YORK SURGICAL SOCIETY.

Stated Meeting, April 14, 1885.

THE VICE-PRESIDENT, CHARLES MCBURNEY, M.D., IN THE CHAIR.

DR. GERSTER presented a patient upon whom he performed

MIKULICZ'S OPERATION

on the 17th of January, 1885, and who was able to walk with only a very slight limp. The man was a professional nurse, forty-eight years of age, who in May, 1881, had an attack of erysipelas in the region of the heel and foot for which he was treated in Bellevue Hospital. A large abscess formed, the calcaneum became involved, and superficial necrosis followed for which the bone was scraped out and he was finally dismissed from the hospital, but not improved.

In 1883, he came under Dr. Gerster's care in the German Hospital with epithelioma in the situation of the ulcer upon the heel about the size of a trade dollar which had never healed, and the character of the new growth had been determined by a number of microscopical examinations. It was sessile and firmly attached to the calcaneum. Dr. Gerster removed it, and at the same time exsected the entire tuberosity of the calcaneum, thus hoping to gain sufficient space for the use of a skin flap formed from the planta pedis to cover the defect with, but succeeded in covering only about one-half of it. Necrosis of this flap followed, due to the compressory dressings used, and to the atheromatous condition of the arteries. The remaining defect was cicatrized over completely within the next three or four months, and ultimately a scar remained, extending from the planta pedis up to the insertion of the tendo Achillis with the foot in the position of pes equinus. The cicatrix frequently ulcerated, especially in cold weather, and finally the ulceration became almost permanent, so that the patient pleaded for an amputation. Dr. Gerster proposed, however, instead of amputating the leg, to perform Mikulicz's operation after having taken into consideration the advisability of a plastic operation according to the usual method of cutting out a flap from the other limb and transposing it to the ulcerated surface, holding the limbs by means of plaster splints in such apposition as to permit the flap to come in contact with the denuded surface, and afterward separating the pedicle of the flap when the circulation in its new attachment had become sufficient to maintain nutrition. In view of the man's atheromatous arteries necrosis of a flap raised for such a plastic operation was almost certain, wherefore, partial exsection of the tarsus was decided upon. The principle of the operation is as follows: in cases in which the heel is denuded of its integument Mikulicz thought that the length of the limb could be preserved and made available for motion without the assistance of complicating apparatus if the calcaneum and astragalus were removed and the anterior portion of the foot saved and brought into contact with the tibia and fibula. The first incision is made almost in the same manner as for Pirogoff's and Symes's operation, cutting down to the bone, beginning a little anterior and below the malleolus of one side, carrying it across the planta pedis to the corresponding point upon the other side; the incision is then extended up to the centre of the malleolus and carried round the leg behind, corresponding to the insertion of the tendo Achillis. Through this latter incision the posterior aspect of the ankle-joint is exposed and the same is entered and dissected up until the head of the astragalus is denuded, and then the astragalus and calcaneum are severed out of their last connections in Chopart's joint.

When this has been done the remnant of the foot, containing the scaphoid, the cuboid, the cuneiform bones, and the metacarpals, and the toes, is hanging by a flap, situated on the anterior portion of the limb, the nutrition of which is sustained through the dorsalis pedis artery.

The tibia and fibula are then sawn through the malleoli, and also the cuboid and scaphoid bones are separated from the soft parts sufficiently to permit the saw to be carried through them on a vertical plane. In this way are left two rather extensive bony surfaces, which are brought together and rendered immobile by driving a nail slantingly through the scaphoid into the spongy portion of the tibial epiphysis. Finally the cutaneous edges are united by a continuous catgut suture, and the limb swathed in an antiseptic dressing.

The patient presented was the second one upon whom he had performed the operation, and the result was the better of the two. As far as his knowledge extended, these two operations were the eighth and ninth which had been performed. In the other case the final result would be satisfactory. In that case the limb was lengthened half an inch, so that the patient would be obliged to have an elevated shoe upon the opposite side. In the case of the patient presented, Dr. Gerster removed a trifle too much of the bone, and produced a shortening of one-fourth of an inch, which was so slight a matter that the patient was able to walk with scarcely a perceptible limp. On account of the free removal of the scaphoid and cuboid bones, he came very near the joint between the scaphoid and the cuneiform bones; in fact, so near that the ligaments fastening that joint were detached, and the mobility present was due to mobility at that articulation, but this was rather an advantage than otherwise.

When the Esmarch bandage was removed, the blood-vessels did not bleed at all, and he was somewhat startled at the thought of the possibility of the atheromatous condition of the vessels, and the constriction to which they had been subjected might seriously interfere with the circulation, but when the foot was brought into its normal position free hemorrhage set in, so free that it became necessary to apply nearly twenty-five ligatures to arrest the hemorrhage. After this was done the bones were brought into apposition, and, as previously mentioned, a long nail was driven through the remnant of the scaphoid bone into the tibia, which gave firm apposition of the sawn surfaces. An antiseptic dressing was applied, and a correct healing of the

wound took place, with primary union of the sawn surfaces.

By February 2d, the nail could be withdrawn; its vicinity never showed any evidence of reaction. The track of the nail secreted a little sero-purulent matter for a few days after its removal, and then closed up. Very soon afterward the patient was ordered to walk about. Mikulicz said that he was obliged to perform tenotomy of the short flexor to allow hyperextension of the toes, but in this case Dr. Gerster had not found it necessary, and by the aid of a shoe, in which the heel was somewhat elevated, the patient was able to walk very comfortably, and with a good deal of elasticity.

In reply to a question, Dr. Gerster said the line of section extended vertically through about the middle of the scaphoid, and through the posterior portion of the cuboid.

CORRESPONDENCE.

THE NINETEENTH CONGRESS OF GERMAN SURGEONS.

BERLIN, April 11, 1885.

MORE than four hundred prominent German surgeons gathered in Berlin to attend the sessions of the German Surgical Congress, which were held from April 8th to 11th, under the presidency of the Nestor of German surgeons, Baron Von Langenbeck. There were also present all the leading physicians of Berlin, among whom may be mentioned Bardeleben, Rose, Gurlt, Hirschberg, and Fränkel. Many professors and practitioners from the provinces also attended, among whom were Volkmann, of Halle, Esmarch, of Kiel, and König, of Göttingen. Numerous representatives from foreign countries were also present—Mikulicz, of Krakow; Winiwarter, of Liege; Ranke, of Groningen, Holland; Albrecht, of Brussels; and Haberen, of Buda-Pesth. The absence of Parisian surgeons was noticeable, not one being present.

Previous to its formal opening, Sir Joseph Lister and Sir James Paget were elected honorary members of the Congress, and a complementary telegram informing them of the fact was forwarded.

PROF. VOLKMANN, of Halle, opened the Congress with an address on the *Surgical Consideration of Tuberculosis*. To Robert Koch he assigned the credit of first discovering the real cause of tuberculosis—the tubercle bacillus—and called attention to the fact that the so-called "consumption" of the lungs may attack almost any organ whatever, and that the surgeon may discover the existence of tuberculosis in the organism, apart and distinct from its presence in the lungs, and as such it is to be considered more as a surgical than as a general physical disorder, and surgeons, therefore, must consider remedial agencies, and duly observe their effect. Volkmann arranged his observations under forty-eight heads, of which the most important may here be stated.

The tuberculous character of a disease is not to be doubted when examination gives positive proof of the presence of the tubercle bacillus, and when anatomical examination confirms the characteristic structural appearance of tubercular tissue.

The diffusion of tuberculosis follows in a marked degree (*a*) by means of the increase of the original infection deposit, (*b*) through the entrance of tubercular virus (bacilli) from the original infection mass into the lymph canals. This common occurrence does not ordinarily conduce to the generalization of the disease, inasmuch as the lymphatics not only impede its progress but plainly, in many cases, render the disease harmless. The importance of the lymphatic glands as a protective apparatus and filter, in local infectious processes, has not been sufficiently appreciated. General tuberculosis only is evident when the gland infection becomes so far extended as to invade the ultimate lymphatics which lie between the blood current and the diseased tissue, or when the thoracic duct itself becomes the seat of infection.

(*c*) Through the introduction of the tubercular poison into the inner wall of a serous sac through the extension of a neighboring tubercular mass, or through the introduction of bacilli-containing pus, etc.

(*d*) In the same manner, through the entrance of the tubercular poison into the various cavities and canals covered with mucous membrane, in which it may become stagnant, or from which it may be removed only with great difficulty.

(*e*) Through the entrance of the poison from an adjoining collection of tubercular material into a non-thrombotic venous trunk, or into a lymph channel communicating directly with the blood current, and as a result of which acute general miliary tuberculosis results.

The discussion concerning the identity of tuberculosis and scrofulosis is not yet determined. By *tuberculosis* is generally meant a local manifestation of the disease, while by scrofulosis a general and constitutional vice of nutrition, a special diathesis or heredity is indicated.

Discussion of Professor Volkmann's paper was deferred until the following day.

PROFESSOR BRAUN, of Jena, then followed with a paper upon *Intestinal Invagination*, and its operative treatment. The Congress expressed the opinion that, in future, cases of intestinal invagination should be committed to the surgical clinic, to which, up to the present time, resort has only been had in hopeless cases.

At the second session, held on April 9th, DR. FEHLEISEN, First Assistant in the Berlin Surgical Clinic, read a paper upon the *High Operation for Diseases of the Bladder*. PROFESSOR MAAS, of Würtzburg, recommended as a substitute the median lithotomy incision on account of its greater freedom from danger. Discussion concerning both these operations for lithotomy will be held at the meeting of the Congress to be held next year.

PROFESSOR KÖNIG, of Göttingen, next described a new method of *Resection of the Joints* of the foot in articular tuberculosis, which already in 32 cases has yielded favorable results. VOLKMANN, of Halle, stated that he still preferred the method of Langenbeck, but cautioned against the too frequent performance of the operation, which, though giving brilliant results so far as the usefulness of the foot is concerned, still, in children, is not necessary and in persons of advanced age may be dangerous. PROFESSOR LANGENBECK reported that his experience with operations for resection in tubercular disease of the joints of the feet and hands has been unfavorable, and expressed astonishment at the favorable results obtained by Professor König.

DR. GAERTNER, Marine Physician, next read a paper upon *The Disinfectant Properties of Carbolic Acid Solutions*. To Professor Koch he gave credit for first accurately demonstrating the proportion of carbolic acid required in solution to insure its germicide effect. Koch's experiments he has repeated and like him finds a three per cent. solution destructive to all known forms of bacilli.

In the Afternoon Session Professor Volkmann's paper upon tuberculosis was brought up for discussion.

On the third day of the Congress, April 10th, PROFESSOR LANGENBECK exhibited a young man upon whom he had operated two years previously for *Spina Bifida*, by injection of iodine into the sac, with the result of entire cure. DR. BERGMAN also brought before the Congress a small girl similarly operated upon with like good result.

Discussion was next held upon the *Treatment of Cleft Palate*. As pertaining to the subject of oral surgery, two cases of recovery from fracture of the lower jaw were exhibited. A case of ankylosis of the lower jaw (cured by resection of the joint) was exhibited by Professor Ranke, of Holland.

The most important discussion of the day, however, was that upon *Resection of the Stomach*. DR. RYDIGIER produced two cases lately operated upon by himself. In one case not only was a carcinoma of the stomach removed, but also a large section of apparently sound tissue, which, upon close examination, was found to contain foci of disease. Dr. Rydigier holds that where, after an operation, the disease returns too little tissue has been resected. No danger of removing too much tissue need be apprehended. He also holds that women endure the operation for resection of the stomach much better than do men. Of five cases operated on by him, three were women and two men. The women are all alive, while both men are dead.

DR. VON HACKER, of Berlin, then referred to Prof. Billroth's operations for resection of the stomach, of which there is a total of 18 operations, 14 of which were for carcinoma. Of these 14, 8 died from the effects of the operation. Of the 6 remaining cases the disease has returned in 5 cases, leaving 1 in which favorable results have been obtained. In view of these statistics, Dr. Von Hacker holds that this operation for cancer of the stomach offers no prospect of favorable results, and advises that in severe cases the operation be avoided, and the patient be left to the natural course of the disease.

DR. BESSEL, of Berlin, in the afternoon session, spoke concerning *Joint Extirpation in Clubfoot*, and expressed the opinion that extirpation of the joint is to be avoided, and, without doubt, limited to cases in which it is specially indicated, and is not to be generalized.

DR. KUMMEL, of Hamburg, then reported the experiments made at Hamburg upon the best methods of *Disinfection during Operations*. As the best means of disinfecting instruments, first of all it is recommended to wash them with ether and wipe thoroughly with wadding, or to cleanse them with soap and warm water, and then to lay them in a three per cent. solution of carbolic acid. Sponges also may be cleansed in this manner, if they are allowed to soak in the carbolic solution. For a thorough cleansing of the hands, a solution of corrosive sublimate, in proportion of 1 to 1000, is insufficient. For this purpose a two to five per cent. solution of carbolic acid seems best adapted, together with washing in chlorine water.

Efforts to purify the air of the operating room have been ineffectual. Simple washing of the floor and walls with soap and water is useless, and, indeed, the use of water may be the origin of fungi, and even steam has no destructive effect upon these fungi. The interesting statement was made, in conclusion, that examination of the expired air of diseased patients revealed the presence of no bacteria.

At the close of the session it was resolved to renew the discussion of Prof. Volkmann's paper upon the surgical aspects of tuberculosis.

At the final session, on April 11th, PROF. ESMARCH, of Kiel, exhibited several *New Apparatus Adapted to Military Surgery*, among which were a new elastic bandage, made of nickel-plated, highly tempered, wrought steel, and a modification of Volkmann's apparatus for shot or otherwise severely wounded limbs.

PROF. ESMARCH then spoke upon *The Transplantation of Large Skin Flaps upon Fresh Wounds*. In order for these to heal quickly, whether they be obtained from freshly amputated limbs or other source, all fat must be thoroughly removed. This method of treatment is especially serviceable in war, on account of the abundance of material.

PROF. ESMARCH also spoke of the *Results of Operations in Complicated Cases of Harelip*, in which, as statistics show, a great proportion of cases operated on at a tender age give, after a longer or shorter time, fatal results. Experience shows the operation to have no settled value. Statistics must be published before the question can be intelligently decided.

PROF. ALBRECHT, of Brussels, next exhibited a series of interesting curiosities, among which were specimens illustrative of the significance of the diverticula of the pharynx, which though met in other suckling animals, in man are rare.

DR. LAUENSTEIN, of Hamburg, returned to the subject of *Resection of the Stomach*, and referred to cases operated upon by himself, and discussed the *technique* of the operation.

At the close of the Congress, Prof. Volkmann earnestly requested Prof. Von Langenbeck, who, on account of ill-health, no longer wished to preside over the meetings of the Congress, to withdraw his resignation. The whole Congress united in this request, and the distinguished surgeon finally consented to yield to the wishes of his associates.

TAIT'S OPERATION.

To the Editor of T E MEDICAL NEWS.

SIR: In your issue of February 21st there is an editorial article on the use and abuse of Battey's and Tait's operations, upon which I will ask your courtesy to enable me to make one or two remarks. Two points I must first of all speak briefly of, because they are points upon which I have now entered my protest time without end, and apparently with very little effect, for I find that every succeeding writer falls into exactly the same error, but I propose to go on drawing attention to my views until, I trust, I may some day see them accepted.

In the first place, I protest against names of persons

being attached to operations, it is such a slip-shod and easy method of description that it is certain to lead to mistakes. In the second place, you say that in the operation which you allude to under my own name, "the conditions which are alleged to require it are not so plain, and the diagnosis is more difficult," I presume, than in the operation which you describe as Battey's. Here, again, the use of these two names is the cause of great confusion. I take it for granted, that you mean, by Battey's operation, "the removal of the ovaries for the purpose of bringing about the menopause under conditions where the disease appears to be due to, or largely dependent upon, the recurrence of menstruation." If this is what you really mean, it must be perfectly evident to any one that such an operation must be always largely speculative, and that really no kind of diagnosis can be made.

If by Tait's operation you mean the removal of diseased tubes, then the diagnosis is perfectly simple and easy; nothing could be more so. It is perfectly true that it is not always easy to diagnose and differentiate hydrosalpinx, pyosalpinx, hæmatosalpinx, and tubal pregnancy. This I have admitted over and over again; but the diagnosis of diseased tubes requiring removal is a perfectly simple and easy matter, in which I am perfectly certain now my mistakes cannot amount to more than five or six per cent.

Perfectly exact diagnosis is not possible in any realm of surgery—even in tumors of the breast, for in many cases it is absolutely impossible to say what the exact nature of the tumor is until it is in the operator's hands, and a section has been made of it. Just so with diseased Fallopian tubes.

The third point to which I want to draw your attention is that in which you say that the operation which you are kind enough to describe as my operation finds no favor with some of the best London authorities—Sir Spencer Wells and Dr. Matthews Duncan. In this you are absolutely mistaken. Dr. Duncan has not in a single instance that you can point to expressed disapproval of the operation for removal of diseased Fallopian tubes. At least, from a large acquaintance with his writings and with his opinions from personal conversations, I have not gathered any such impression; in fact, my belief is absolutely to the contrary. With Sir Spencer Wells's views I am now not much concerned, but so far as I know them on this point, he does not object to the operation. He says the cases do not exist, or, if they do, they all go to Birmingham. I have published details of four cases, and I am in possession of the facts of many others, which have passed through Sir Spencer's own hands, and which he has failed to recognize. He will not do as some of his London brethren do, and as many of your countrymen do, come to Birmingham and be taught, so he must go on in his wilful ignorance. In this instance, happily, Sir Spencer Wells's ignorance will not stop surgical progress as it has done in the past.

But the last piece of evidence concerning Sir Spencer Wells which has come before me, on the authority of the Editor of the *British Journal of Gynecology*, is certainly not at all in favor of your statement of Sir Spencer Wells's opinions. In fact, it seems to me that Sir Spencer Wells, from being an obstructive, has suddenly turned round to be one of the most advanced promoters of our new form of abdominal surgery—in fact, he has advanced to a degree which I for one certainly shall hesitate for a long time to follow. He has actually, on the authority given, removed perfectly healthy ovaries in a woman who was the subject of recurring puerperal mania, in order to prevent her having more children. This may be, or it may not be, a justifiable proceeding; this is not the point under discussion; but it is a proceeding which I venture to say has not yet been advocated by any British surgeon, and it is one upon which the strongest possible opinions may be expressed in an adverse direction. Certainly, after having performed such an operation as this, Sir Spencer Wells's mouth must be forever closed against anybody else.

I am, sir,

Yours very truly,

LAWSON TAIT.

7 THE CRESCENT, BIRMINGHAM.
April 11, 1885.

NEWS ITEMS.

MONTREAL.

(*From our Special Correspondent.*)

THE SMALLPOX EPIDEMIC.—For the last five years this city has been quite free from smallpox, and the authorities began to think that we would never again experience an epidemic, so the Civic Smallpox Hospital was closed and vaccination was, except among the well-to-do classes, almost altogether neglected. The public vaccinators had but little to do; in fact, up to a week or two ago the offices of Public Vaccinators were vacant. Some few weeks ago (four) two railway employés came from Chicago suffering from smallpox. The city having no means of isolation ready, one case went to a private house, and the other to the Hôtel Dieu Hospital. From these two cases the disease has spread in every direction; already several deaths (five) have occurred, and the reopened Civic Smallpox Hospital contains twenty cases, the majority of them traceable to the case admitted into the Hôtel Dieu. The Hôtel Dieu, in consequence of the number occurring there, has been closed, and is now undergoing thorough disinfection.

The Board of Health, under the active management of the new Chairman, is doing everything in its power to stamp out the disease, and where patients will not go to hospital (there being no law to compel them), guardians are placed before the house containing the smallpox patients, to warn all people against entering, and the whole neighborhood is vaccinated. Physicians are required to report all cases occurring in their practice, and every case is then investigated by the Board of Health, and proper disinfection and isolation enforced. It is hoped that the disease will by these means be soon under control.

NEW ACT RESPECTING LUNATIC ASYLUMS.—As a result of the discussion provoked by Dr. Hack Tuke's report on the lunatic asylums of the Province of Quebec, the provincial government has introduced a bill which is an attempt to remedy some of the evils complained of. The only important change is the provision for the appointment of two medical officers in addition to the medical superintendent, all to be paid by the government. These officers are not *required* to

reside in the asylum. The medical superintendent's residence is not specified. The house physician must reside *near*, but not in the asylum, and the assistant house physician is to reside "in the asylum itself or its immediate neighborhood. The house physician and his assistant are required to devote their whole time to the service of the patients. The proprietors of the asylums and their subordinates are bound to carry out the orders of the house physician or his assistant (not as heretofore, to act under the orders of their masters, the proprietors), they may also require the proprietors to dismiss keepers, nurses, and guardians, for incompetence and insubordination.

These changes will, no doubt, prove of great benefit, provided the proper medical officers are obtained, men having some more knowledge of the treatment of the insane than is obtained by a short college course, and large political influence. So many internal reforms are needed that it will require determined men to carry them out, seeing that it will be to the advantage of the proprietors to place as many obstacles in the way as possible. What is needed is the abolishing entirely of the iniquitous *farming* system, but this reform the government apparently has not the courage to propose.

THE UNITED STATES TO BE REPRESENTED AT THE INTERNATIONAL CHOLERA CONFERENCE.—The President has detailed Dr. George M. Sternberg, U. S. A., to attend, as the delegate from the United States, the International Cholera Conference which convenes in Rome on May 15th. Dr. Sternberg sailed for Europe on Wednesday last.

CHOLERA IN CALCUTTA.—The Surgeon-General of the Marine-Hospital Service is informed that cholera is prevailing in Calcutta to an alarming extent.

VOLUNTEER SURGEONS FOR RUSSIANS.—Drs. J. A. Post, and George E. Ranney, of Lansing, Michigan, according to the Lansing *Republican*, have forwarded through the medium of the Secretary of State a communication to the Russian Minister at Washington, tendering the services of themselves and a corps of twenty-three experienced Michigan surgeons for the field, in case of war between England and Russia.

INTERNATIONAL CONGRESS OF HYDROLOGY AND CLIMATOLOGY OF BIARRITZ.—The first International Congress of Hydrology and Climatology of Biarritz will open at Biarritz, October 1, 1886. The French Minister of Commerce is the honorary, and Dr. Durand Fardel the acting, president.

The sessions of the Congress will last eight days, after which excursions will be made to the different thermal and principal sanitary stations of the Pyrenees.

MULTIPLE PREGNANCY.—An account is given in *L'Echo d'Oran*, of February 14, 1885, of an Arab woman who gave birth at one confinement to five children, three of whom are still alive. The report seems to be well authenticated.—*Le Progrès Medical*, March 14, 1885.

THE COLLEGE OF PHYSICIANS AND SURGEONS OF QUEBEC will require, previous to admission to the study of medicine for the session of 1885–1886, a preliminary examination in Latin, French, English, Belles-Lettres, History, Geography, Arithmetic, Algebra, and Geometry, all of which are obligatory. The three following subjects are elective: Greek, Physics, and Philosophy.

NOTES AND QUERIES.

CORRIGENDUM.

DISINFECTANTS.

IN the paper on Moist Heat, published in the issue of THE MEDICAL NEWS of March 14, there has been a transposition of the figures, in brackets, on page 285, representing the degrees of the Fahrenheit corresponding with the degrees of the Centigrade scale.

In the paper No. IX, *The Disinfecting and Antiseptic Powder* recommended on page 425 is withdrawn. This powder was introduced by the Chairman of the Committee, after the paper had been submitted to the scrutiny of the entire Committee, on his own responsibility, and in the belief that a disinfectant in this form would prove useful. There are practical objections to the formula as given, but when circumstances permit some additional experiments, another will be substituted for it.

On page 425, second column, near bottom, after the directions, "one fluidounce of this standard solution to the gallon of water will make a suitable solution for the disinfection of clothing," refer to the following foot-note: Decolorize the solution before using by adding to it a little chloride of lime or Labarraque's solution.

On page 426, second column, twenty-sixth line, after word "water," refer to foot-note as follows: Decolorize by adding a little chloride of lime or Labarraque's solution.

After this reference the text should read: The walls and ceiling, if plastered, should be brushed over with this solution, after which they *should* be whitewashed with a lime-wash.

OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, FROM APRIL 21 TO APRIL 27, 1885.

Lieutenant-Colonel JOS. R. SMITH, *Surgeon*, Major JNO. S. BILLINGS, *Surgeon*, Major HENRY MCELDENY, *Surgeon*.—Detailed to represent the Medical Department of the Army at the annual meeting of the American Medical Association, to be held at New Orleans, La, April 28, 1885.—*S. O. 91, A. G. O.*, April 21, 1885.

CRAMPTON, L. W., *Captain and Assistant Surgeon*.—Assigned to duty as Post Surgeon, Fort Bridger, Wyoming Territory.—*S. O. 33, Department of the Platte*, April 22, 1885.

BORDEN, WILLIAM C., *First Lieutenant and Assistant Surgeon*.—Ordered for duty at Fort Douglas, Utah Territory.—*S. O. 33, Department of the Platte*, April 22, 1885.

ROBERTSON, R. L., *First Lieutenant and Assistant Surgeon*.—Granted leave of absence for one month.—*S. O. 43, Department of Texas*, April 16, 1885.

OFFICIAL LIST OF CHANGES OF STATIONS AND DUTIES OF MEDICAL OFFICERS OF THE UNITED STATES MARINE-HOSPITAL SERVICE, FOR THE WEEK ENDING APRIL 25, 1885.

SAWTELLE, H. W., *Surgeon*.—When relieved, to proceed to Detroit, Mich., and assume charge of the Service, April 23, 1885.

URQUHART, F. M., *Passed Assistant Surgeon*.—To assume charge of Cape Charles Quarantine Station, April 23, 1885.

WILLIAMS, L. L., *Assistant Surgeon*.—When relieved, to proceed to Norfolk, Va., for temporary duty, April 23, 1885.

THE MEDICAL NEWS *will be pleased to receive early intelligence of local events of general medical interest, or of matters which it is desirable to bring to the notice of the profession.*

Local papers containing reports or news items should be marked.

Letters, whether written for publication or private information, must be authenticated by the names and addresses of their writers—of course not necessarily for publication.

All communications relating to the editorial department of the NEWS *should be addressed to No. 1004 Walnut Street, Philadelphia.*